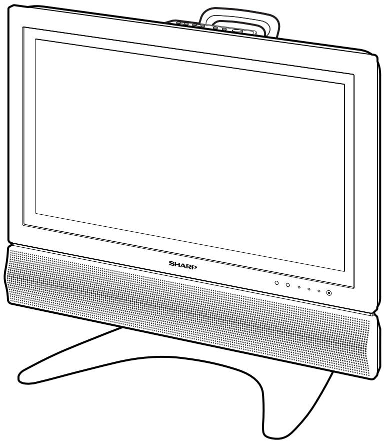
SHARP

SERVICE MANUAL

S14N8LC22AD1E



LCD COLOUR TELEVISION

MODEL LC-22AD1E

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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SHARP CORPORATION

IMPORTANT SERVICE SAFETY PRECAUTION

■ **Service work should be perfomed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:**

WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.

CAUTION: FOR CONTINUED PROTECTION AGAINST A RISK OF FIRE REPLACE ONLY WITH SAME TYPE F3701 (T2.5AL, 250V), F3702 (T3.15AL, 250V), F6551 (T1.25AL, 250V), F6552 (T1.25AL, 250V), F6553 (T1.25AL, 250V) AND F6554 (T1.25AL, 250V) FUSE.

BEFORE RETURNING THE RECEIVER (Fire & Shock Hazard)

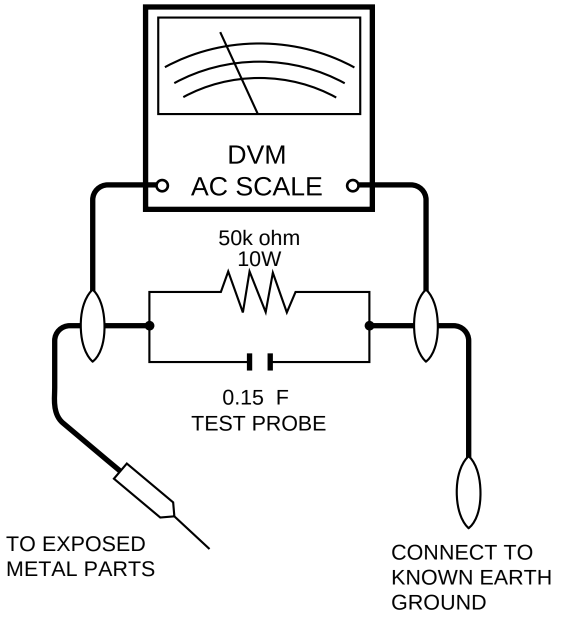
Before returning the receiver to the user, perform the following safety checks:

1. Inspect all lead dress to make certain that leads are not pinched, and check that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulation materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacitor networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.

- Plug the AC cord directly into a 110~240 volt AC outlet, and connect the DC power cable into the receiver's DC jack. (Do not use an isolation transformer for this test).
- Using two clip leads, connect a 50k ohm, 10 watt resistor paralleled by a 0.15μF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to an earth ground.
- Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity or measure the AC voltage drop across the resisor.
- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.

  All checks must be repeated with the AC cord plug connection reversed. (If necessary, a nonpolarized adaptor plug must be used only for the purpose of completing these checks.)

  Any reading of 0.75V rms (this corresponds to 0.5 milliamp. rms AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the monitor to the owner.



SAFETY NOTICE

Many electrical and mechanical parts in LCD television have special safety-related characteristics.

These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.

Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by " ⚠ " and shaded areas in the ***Replacement Parts Lists*** and ***Schematic Diagrams***.

For continued protection, replacement parts must be identical to those used in the original circuit.

The use of a substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire or other hazards.

Precautions for using lead-free solder

1 Employing lead-free solder

"Inverter PWB","AV PWB","R/C,LED PWB","EXT-SP TERMINAL PWB","OPEARATION PWB","SP-JACK PWB","MAIN PWB"of this model employs lead-free solder. The LF symbol indicates lead-free solder, and is attached on the PWBs and service manuals. The alphabetical character following LF shows the type of lead-free solder.

Example:

LFa

Sn-Ag-Cu   Indicates lead-free solder of tin, silver and copper.

2 Using lead-free wire solder

When fixing the PWB soldered with the lead-free solder, apply lead-free wire solder. Repairing with conventional lead wire solder may cause damage or accident due to cracks.

As the melting point of lead-free solder (Sn-Ag-Cu) is higher than the lead wire solder by 40ºC, we recommend you to use a dedicated soldering bit, if you are not familiar with how to obtain lead-free wire solder or soldening bit, contact our service station or service ranch in your area.

3 Soldering

As the melting point of lead-free solder (Sn-Ag-Cu) is about 220°C which is higher than the conventional lead solder by 40°C, and as it has poor solder wettabillty, you may be apt to keep the soldering bit in contact with the PWB for extended period of time. However, Since the land may be peeled off or the maximum heat-resistance temperature of parts may be excoeded, remove the bit from the PWB as soon as you conurm the steady soldering condition.

Lead-free solder contains more tin, and the end of the soldering bit may be easily corroded. Make sure to tum on and off the power of the bit as required.

if a different type of solder stays on the tip of the soldering bit, it is alloyed with lead-free solder. Clean the bit after every use of it.

When the tip of the soldering bit is blackened during use, file it with steel wool or fine sandpaper.

Becareful when replacing parts with polarity indication on the PWB silk.

Lead-free wire solder for servicing

Part No,	★	Description	Code
ZHNDAi123250E	J	ϕ0.3mm 250g(1roll)	BL
ZHNDAi126500E	J	ϕ0.6mm 500g(1roll)	BK
ZHNDAi12801KE	J	ϕ1.0mm 1kg(1roll)	BM

SPECIFICATIONS

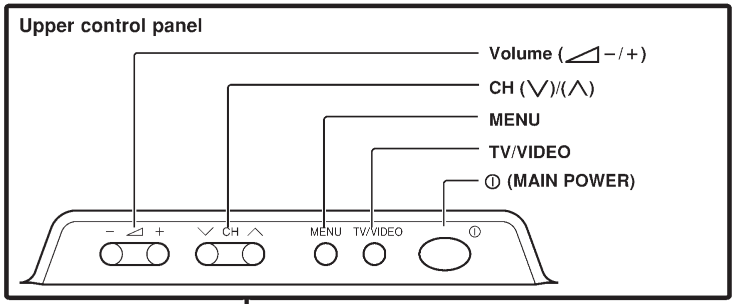
Item			22" LCD COLOUR TV, Model: LC-22AD1E
LCD panel			22" Advanced Super View & BLACK TFT LCD
Number of dots			1,229,760 dots (854 × 480 × 3 dots)
Video colour system			PAL/SECAM/NTSC 3.58/NTSC 4.43/PAL 60
TV Function	TV-Standard	Analogue	CCIR (B/G, I, D/K, L)
		Digital	DVB-T (2K/8K OFDM)
	Receiving Channel	VHF/UHF	E2-E69 ch, I21-I69 ch, IR A-IR Jch, F2-F10 ch
		CATV	Hyper-band, S1 – S41 ch
	TV-Tuning System	Analogue	Auto Preset 199 ch, Auto Label, Auto Sort
		Digital	Auto Preset 999 ch, Auto Label, Auto Sort
	STEREO/BILINGUAL		NICAM/A2 stereo
Brightness			430 cd/m^2
Viewing angles			H: 170° V: 170°
Audio amplifier			5.0 W × 2
Speakers			ø 6 cm 2 pcs, ø 2.5 cm 2 pcs
Terminals	Rear	ANTENNA IN	UHF/VHF 75 Ω Din type (Analogue)
		ANTENNA IN	UHF/VHF 75 Ω Din type (Digital)
		ANTENNA OUT	UHF/VHF 75 Ω Din type (Digital)
		AV-IN 1	SCART (AV in, RGB in, TV out)
		AV-IN 2	SCART (AV in/out, S-Video in)
		AV-IN 3	S-VIDEO, VIDEO, AUDIO
		AUDIO OUT	Digital audio output
		SP OUTPUT	External speaker (L and R)
	Front	Headphones	ø 3.5 mm jack (Front)
OSD language			English/German/French/Spanish/Italian/Swedish/Dutch/Portuguese/Finnish/Turkish
Power requirement			DC 13 V, AC 110 V – 240 V, (50/60 Hz)
Power Consumption			70 W (1.3 W at Standby) (Method IEC60107) : AC 230 V (with AC Adapter)
			57 W (Method IEC60107) : DC 13 V
Weight			11.2 kg w/o accessories
Accessories			Operation manual, Remote control, Battery (× 2), AC adapter, AC cord, Cable clamps (× 2), Antenna cable (× 1)

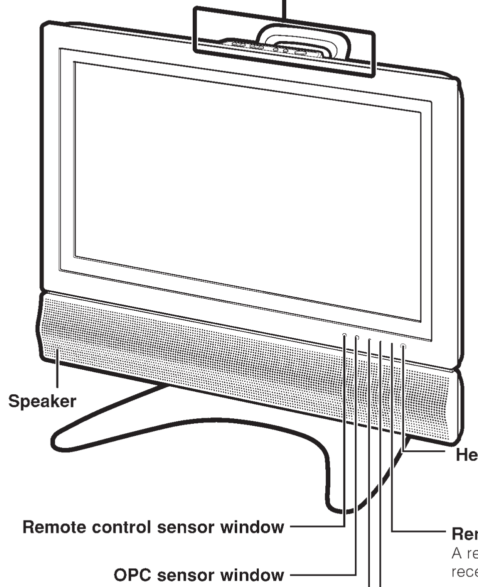
Specifications are subject to change without prior notice.

Part name of Main unit

Controls

Upper control panel


Volume (◢ −/+)
CH (∨)/(∧)
MENU
TV/VIDEO
ⓘ (MAIN POWER)
− ◢ +
∨ CH ∧
MENU
TV/VIDEO


Speaker
Headphone jack
Remote control sensor window
OPC sensor window

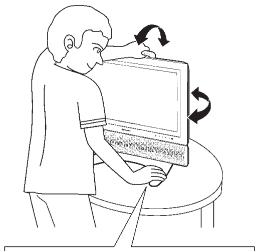
Remote control sensor indicator
A red indicator blinks when the TV set receives the remote control signal.

OPC (Optical Picture Control) indicator
A green indicator lights when “Brightness” is set to “auto”.

STANDBY/ON indicator
A green indicator lights when the power is on and a red indicator lights when in the standby mode (the indicator will not light when the main power is off).

To change the vertical angle of the LCD TV set, tilt the screen up to 5 degrees forward or 10 degrees backward. The TV set can also be rotated 25 degrees to right and left. Please adjust the angle so that the TV set can be watched most comfortably.

How to adjust the angle

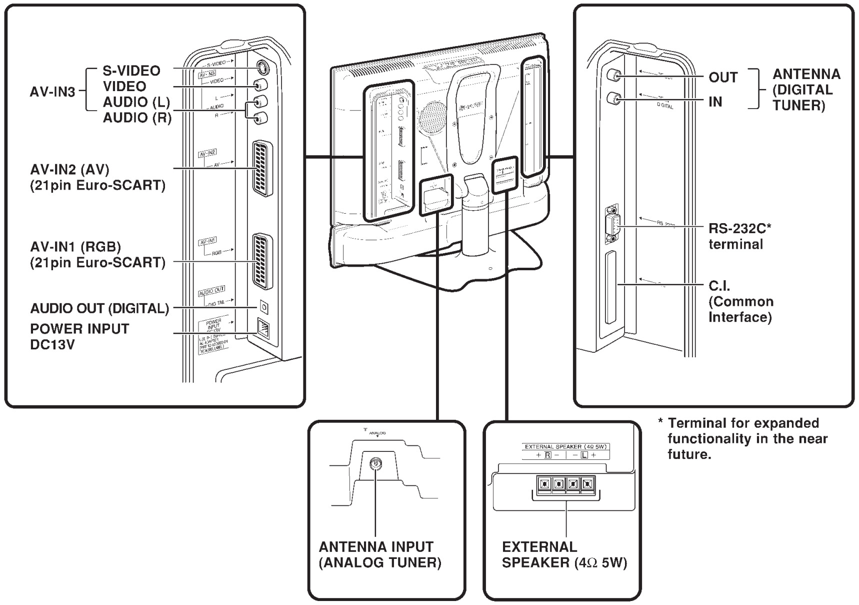


Hold the carrying handle and tilt the screen while steadying the stand with your other hand.

NOTE

- **TV/VIDEO**, **CH(∨)/(∧)**, **Volume (◢ −/+)** and **MENU** on the main unit have the same functions as the same buttons on the remote control. Basically, this operation manual provides a description based on operation using the remote control.

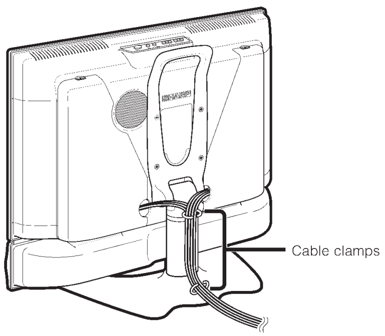
Terminals


AV-IN3
S-VIDEO
VIDEO
AUDIO (L)
AUDIO (R)
AV-IN2 (AV)
(21pin Euro-SCART)
AV-IN1 (RGB)
(21pin Euro-SCART)
AUDIO OUT (DIGITAL)
POWER INPUT
DC13V
OUT
IN
ANTENNA
(DIGITAL
TUNER)
RS-232C*
terminal
C.I.
(Common
Interface)
ANTENNA INPUT
(ANALOG TUNER)
EXTERNAL
SPEAKER (4Ω 5W)

* Terminal for expanded functionality in the near future.

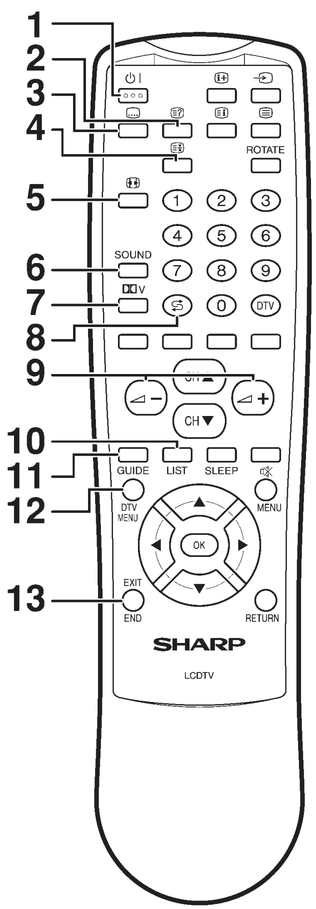
How to fix the cables

- Secure cables and cords with the supplied cable clamps so that they do not get caught when mounting the cover.


Cable clamps

Part name of Remote control unit

Remote control unit



NOTE

- When using the remote control unit, point it at the Display.

1 **⏻ | (STANDBY/ON)**
To switch the power on and off.

2 **(Reveal hidden for TELETEXT)**
TELETEXT mode: Display hidden characters

3 **(SUBTITLE for TELETEXT)**
Analogue TV: To turn the subtitles on and off.
Digital mode: Display the subtitle selectio
screen.

4 **(HOLD for TELETEXT)**
TELETEXT mode: Hold the current teletext page

5 **(WIDE MODE)**
TV/External input mode: Change the wide imag
mode.

6 **SOUND**
Select the sound multiplex mode.

7 **◫V**
Select Virtual Dolby Surround settings.

8 **(Flashback)**
Press to return to the previous channel in norm
viewing mode.
Press to return to the previous page in TELETEX
mode.

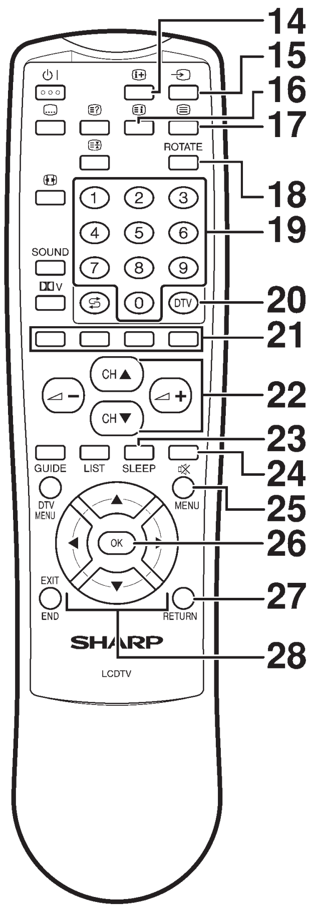
9 **◿– / ◿+ (VOLUME)**
Set the volume.

10 **LIST**
Digital mode: Display the favourite digit
programme list.

11 **GUIDE**
Digital mode: To Display EPG (Electroni
Programme Guide) screen.

12 **DTV MENU**
Digital mode: Display the digital TV menu scree

13 **END/EXIT**
Turn off the On-screen display.



14 **(DISPLAY/INFO)**
Analogue TV: Display the programme number and time.
Digital TV: Display the programme information.

15 **(INPUT SOURCE)**
Select an input source. (TV, DTV, AV1, AV2, AV3)

16 **(TOP Overview for TELETEXT)**
TELETEXT mode: Display an index page for CEEFAX/FLOF information. TOP Overview for TOP programme.

17 **(TELETEXT)**
Select the TELETEXT mode. (all TV image, DTV/DATA image, all TEXT image, TV/TEXT image)
Digital mode: Select DTV data broadcasting and TELETEXT.

18 **ROTATE**
Set the orientation of the picture.

19 **0 – 9**
TV/External input mode: Set the channel.
TELETEXT mode: Set the page.

20 **DTV**
Switch from the Digital-TV mode and other input source.
For example, when viewing an image from AV2, press **DTV** to switch to the Digital-TV mode. Press **DTV** again to return to AV2 screen.

21 **Colour (RED/GREEN/YELLOW/BLUE)**
TELETEXT mode: Select a page.
DTV mode: The coloured buttons are used to select correspondingly to the coloured items in the menu screen.

22 **CH▲/CH▼**
TV/External input mode: Select the channel.
TELETEXT mode: Set the page.

23 **SLEEP**
Display sleep timer information.

24 **🔇 (MUTE)**
Mute the sound.

25 **MENU**
Display the analogue TV menu screen.

26 **OK**
Execute a command.

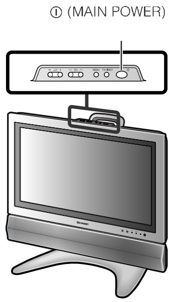
27 **RETURN**
MENU mode: Return to the previous menu screen.

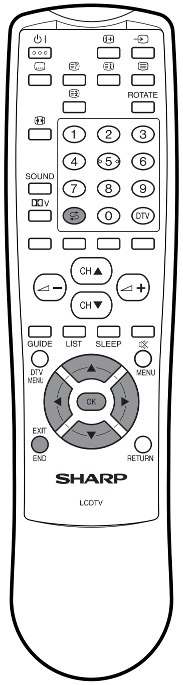
28 **▲/▼/◀/▶ (Cursor)**
Select a desired item on the setting screen.
DTV mode: Select the channel with ▲/▼.
Select the programme information area when EPG is displayed.
TELETEXT mode: Set the area of magnification. (full/upper half/lower half)

Preparation

First installation

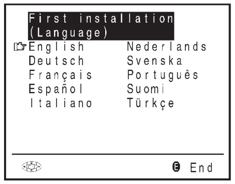
When you turn on the LCD TV set for the first time, the First installation routine, which makes installation easier, is activated. Using this routine, you can select the on-screen display language, and automatically search for and store all the receivable channels.





1 Press the **MAIN POWER** switch. The "First installation (Language)" screen with a list of the languages for the on-screen display appears.

2 Press ▲/▼/◀/▶ to select the desired language, and then press **OK**. The "First installation (Automatic search)" screen appears in the language selected.

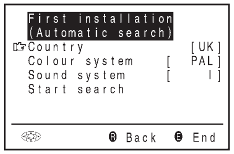


```
First installation
(Language)
☞English        Nederlands
 Deutsch        Svenska
 Français       Português
 Español        Suomi
 Italiano       Türkçe

                        E End
```

NOTE

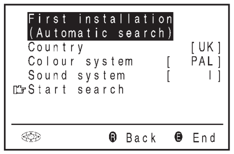
- You can change the on-screen display language after the First installation routine by selecting "Language" on the TV menu.

3 Press ▲/▼ to select the desired adjustment item, and then press **OK**. Then press ◀/▶ to select the desired item.



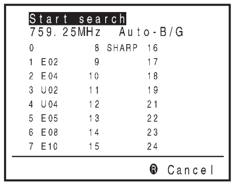
```
First installation
(Automatic search)
☞Country                 [UK]
 Colour system       [   PAL]
 Sound system        [     I]
 Start search

              R Back   E End
```

4 Press ▲/▼ to select "Start search".



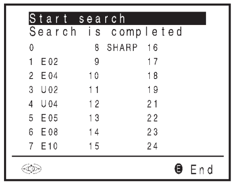
```
First installation
(Automatic search)
 Country                 [UK]
 Colour system       [   PAL]
 Sound system        [     I]
☞Start search

              R Back   E End
```

5 Press **OK** to begin the automatic programme search.



```
Start search
759.25MHz   Auto-B/G
0           8 SHARP 16
1 E02       9       17
2 E04      10       18
3 U02      11       19
4 U04      12       21
5 E05      13       22
6 E08      14       23
7 E10      15       24

                R Cancel
```

6 Press **END** to exit.



```
Start search
Search is completed
0           8 SHARP 16
1 E02       9       17
2 E04      10       18
3 U02      11       19
4 U04      12       21
5 E05      13       22
6 E08      14       23
7 E10      15       24

                   E End
```

NOTE

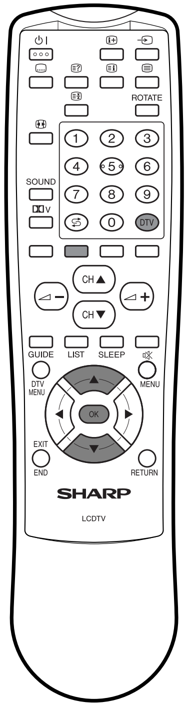
- The input mode is automatically switched to AV1 when "First installation" is selected. If you selected "First installation", and want to return to the previous screen, press **Flashback** (⇆).

Virgin mode

Digital Video Broadcasting is a transmission scheme. It is much more than a simple replacement for existing analogue television transmission. DVB provides more stations, clearer picture quality and other services to be displayed on screen. It also allows a range of new features and services including subtitling and multiple audio tracks.

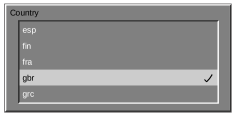
For viewing digital broadcasts, please follow the procedure below to set up.

- In DTV mode, some menu items displayed in black cannot be selected.



1 Press **DTV** to switch to the DTV mode.

2 Press ▲/▼ to select the country where you are located. When you cannot find the country you live in, select the country from the list which shares the same time zone.



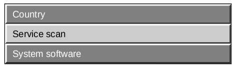
```
Country
esp
fin
fra
gbr  ✓
grc
```

3 Press **OK** to enter the setting.

- Installation screen displays. Press **OK** to go to the next step.

4 Press ▲/▼ to select "Service scan", and then press **OK**.

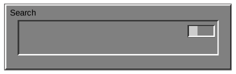
- Search screen displays.



```
Country
Service scan
System software
```

5 Press **OK**, and Search finds all the digital broadcasting channels viewable in your area.

- The Search menu disappears and you can watch the programme.



```
Search
```

NOTE

- If you exit DTV mode while Virgin mode is still incomplete, go back to step 1 and try it again.

Country list

aut: Austria
bel: Belgium
che: Switzerland
deu: Germany
dnk: Denmark
esp: Spain
fin: Finland
fra: France
gbr: United Kingdom
grc: Greece
ita: Italy
lux: Luxembourg
nld: Netherlands
nor: Norway
prt: Portugal
swe: Sweden
tur: Turkey

Dgital TV features

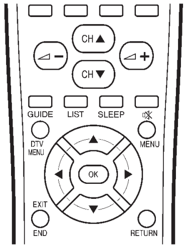
Selecting digital menu items

List of DTV menu items to help you with operations.

- Guide (RED)
  - Theme
  - Mode
- Setup (GREEN)
  - Service lists
    - Service list type
    - TV service lists
      - Rearrange TV services
      - New TV services
      - Installed TV services
      - Uninstalled TV services
    - Radio services lists
      - Rearrange radio services
      - New radio services
      - Installed radio services
      - Uninstalled radio services
  - System setting
    - Languages
      - Audio
      - Subtitle
      - Teletext
    - Time Zone
    - Banner duration
  - Installation
    - Country 🔒
    - Service scan
      - Search 🔒
      - Found TV services
      - Found radio services
      - Store
      - Discard
    - Reinstall all services 🔒
    - System software
  - Access restrictions
    - Maturity rating 🔒
    - TV services 🔒
    - Radio services 🔒
- Preference (BLUE)
  - Audio lang.
  - Subtitle lang.

NOTE

- 🔒 mark indicates in some cases PIN input may be required.
- The illustrations and on-screen displays in this manual are for explanation purposes and may vary slightly from the actual operations.

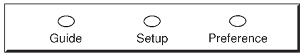


Selecting DTV mode

Press ⇥ to toggle between TV/DTV/AV1/AV2/AV3 mode.
Press **DTV MENU** to directly display DTV menu screen.

About colour buttons

Press **DTV MENU** to display the DTV Menu screen.



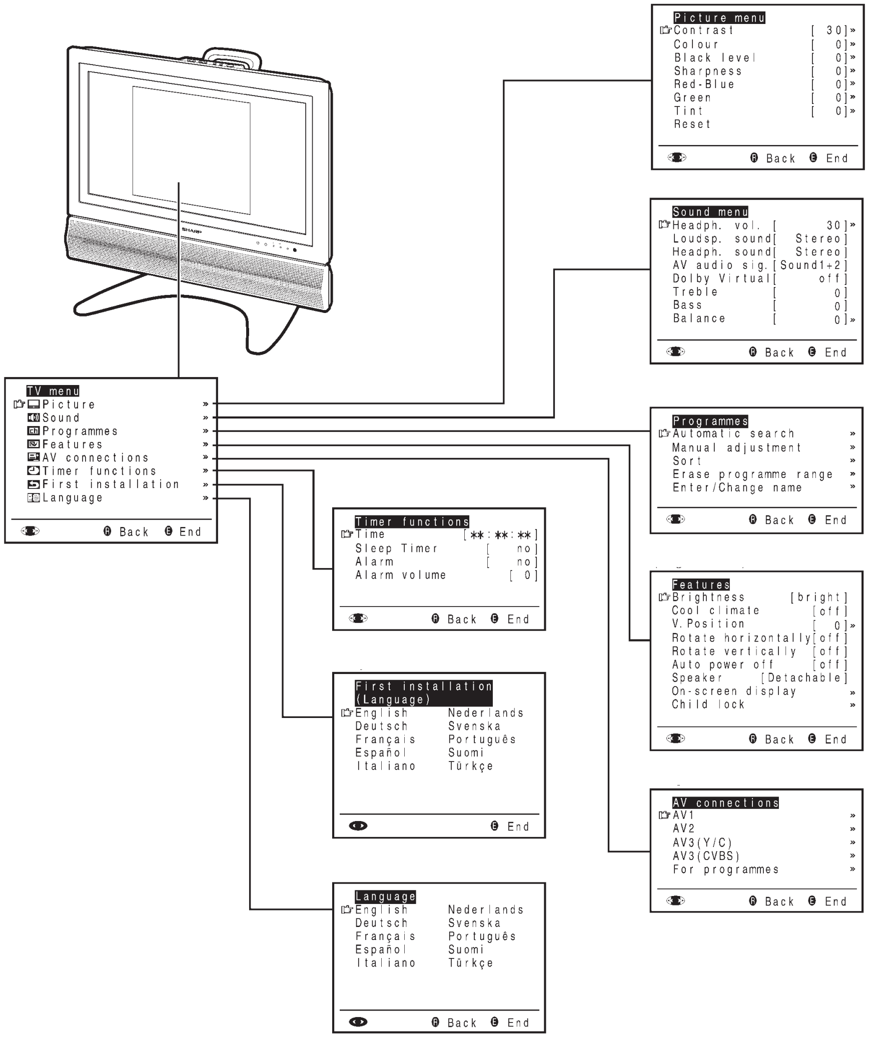
Simply press colour button (**RED**/**GREEN**/**BLUE**) to directly display desired DTV menu.

Guide: RED button
Setup: GREEN button
Preference: BLUE button

Useful features

Selecting menu items (Continued)

■ **TV Menu Setting Screens**



```
TV menu
Picture                     »
Sound                       »
Programmes                  »
Features                    »
AV connections              »
Timer functions             »
First installation          »
Language                    »
                 Back    End
```

```
Picture menu
Contrast           [  30]»
Colour             [   0]»
Black level        [   0]»
Sharpness          [   0]»
Red-Blue           [   0]»
Green              [   0]»
Tint               [   0]»
Reset
              Back    End
```

```
Sound menu
Headph. vol.  [        30]»
Loudsp. sound[    Stereo]
Headph. sound[    Stereo]
AV audio sig.[Sound1+2]
Dolby Virtual[       off]
Treble        [         0]
Bass          [         0]
Balance       [         0]»
              Back    End
```

```
Programmes
Automatic search            »
Manual adjustment           »
Sort                        »
Erase programme range       »
Enter/Change name           »
              Back    End
```

```
Features
Brightness         [bright]
Cool climate          [off]
V.Position          [   0]»
Rotate horizontally[off]
Rotate vertically     [off]
Auto power off        [off]
Speaker        [Detachable]
On-screen display          »
Child lock                 »
              Back    End
```

```
AV connections
AV1                        »
AV2                        »
AV3(Y/C)                   »
AV3(CVBS)                  »
For programmes             »
              Back    End
```

```
Timer functions
Time           [**:**:**]
Sleep Timer     [      no]
Alarm           [      no]
Alarm volume        [  0]
              Back    End
```

```
First installation
(Language)
English        Nederlands
Deutsch        Svenska
Français       Português
Español        Suomi
Italiano       Türkçe
                      End
```

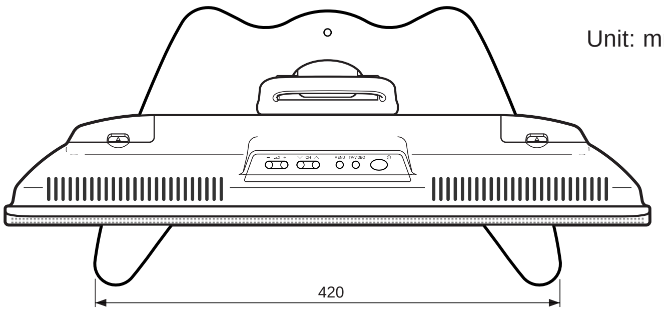
```
Language
English        Nederlands
Deutsch        Svenska
Français       Português
Español        Suomi
Italiano       Türkçe
              Back    End
```

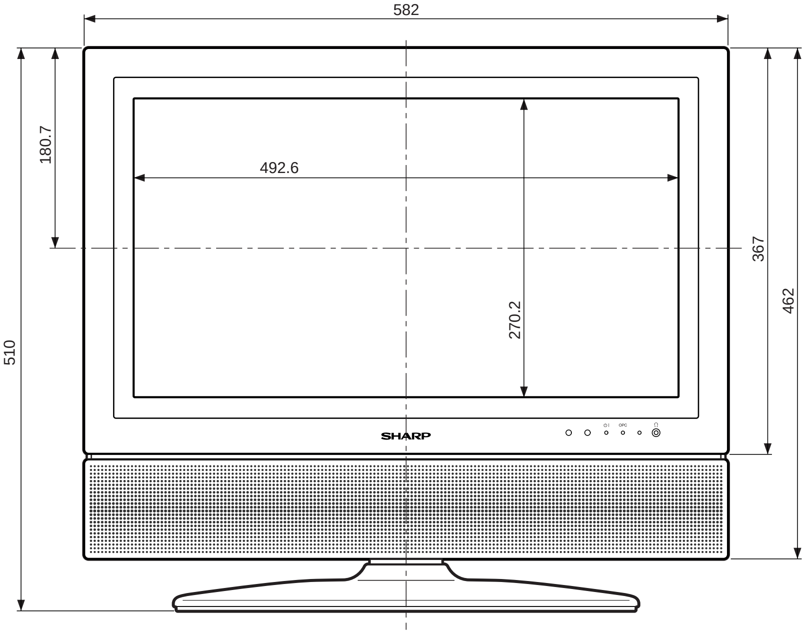
NOTE

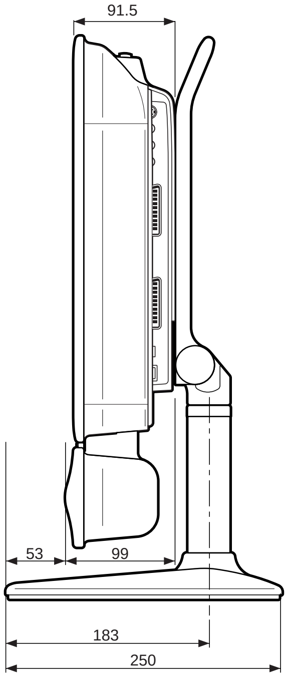
- The illustrations and on-screen displays in this manual are for explanation purposes and may vary slightly from the actual operations.

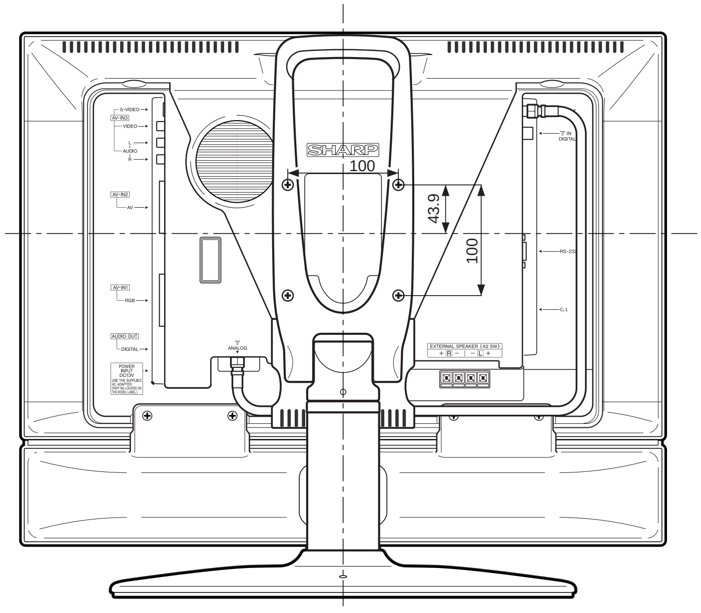
DIMENSIONS

Unit: mm



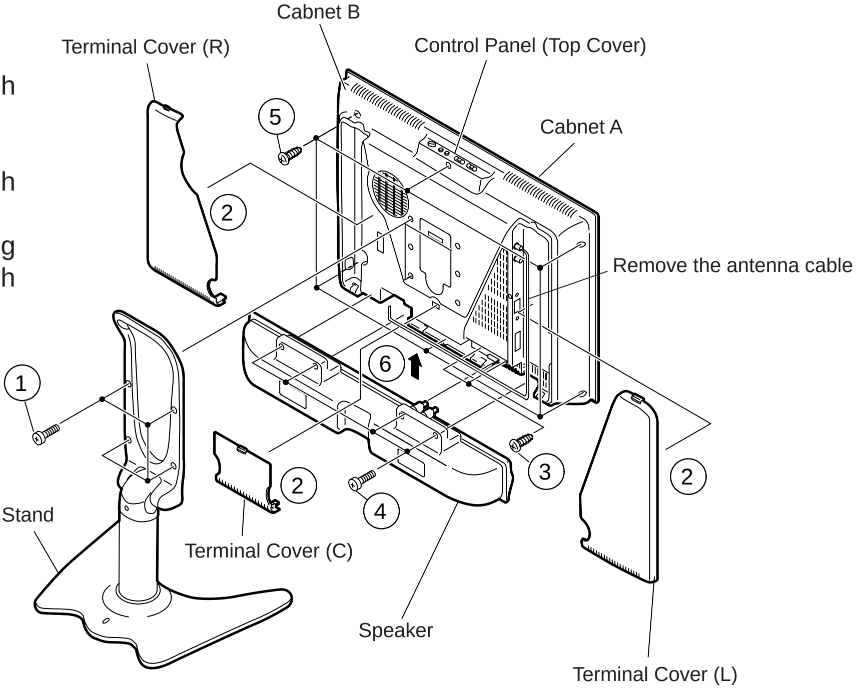

582
180.7
492.6
510
270.2
367
462
SHARP

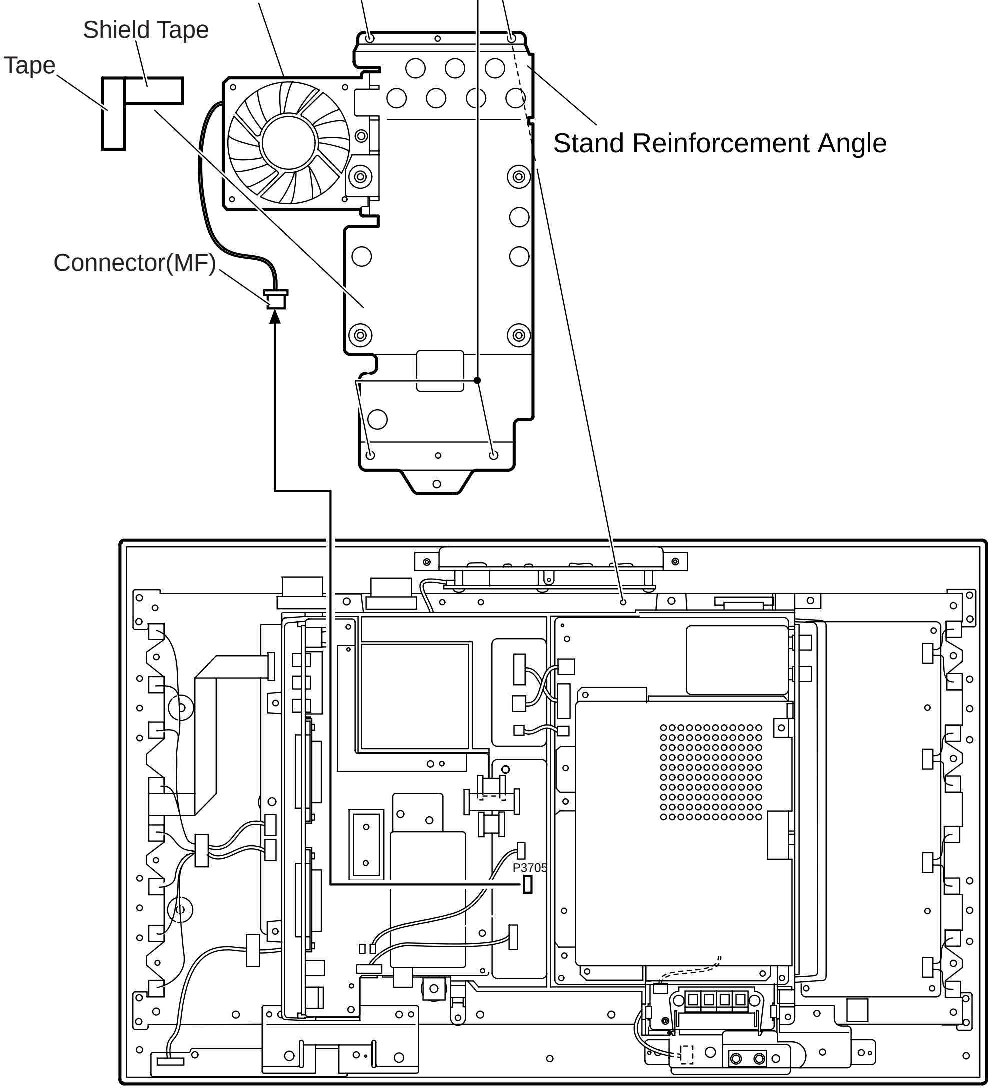

91.5
53
99
183
250


S-VIDEO
AV-IN3
VIDEO
L
AUDIO
R
AV-IN2
AV
AV-IN1
RGB
AUDIO OUT
DIGITAL
POWER INPUT DC13V
USE THE SUPPLIED AC ADAPTER. (PART NO. LOCATED ON THE MODEL LABEL.)
ANALOG
SHARP
100
43.9
100
IN DIGITAL
RS-232
C.L
EXTERNAL SPEAKER (4Ω 5W)
+ R − − L +

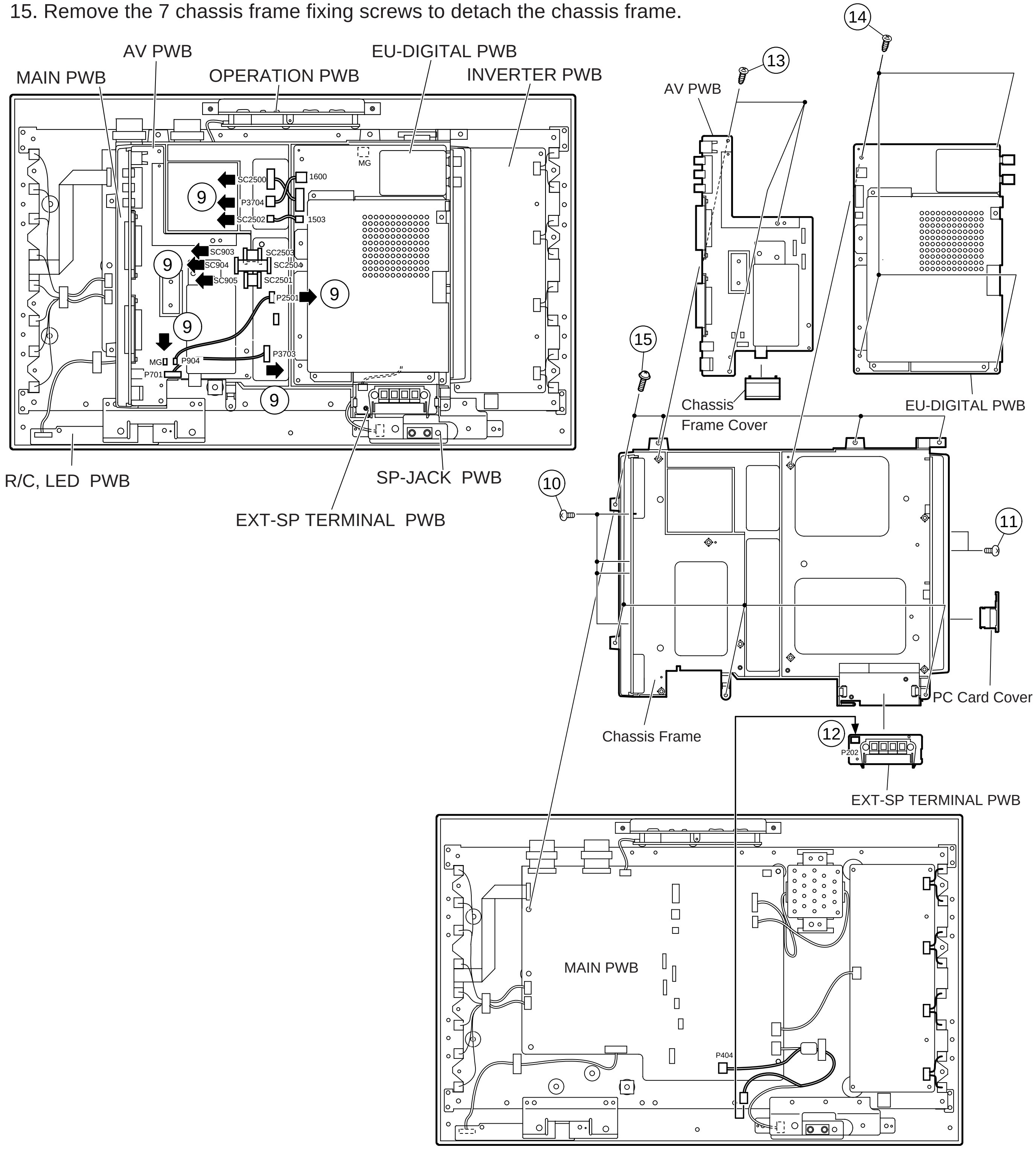
REMOVING OF MAJOR PARTS

1. Remove the 4 stand fixing screws to detach the stand.
2. Remove the terminal covers (R), (L) and (C).
3. Remove the 2 terminal fixing screws.
4. Remove the 4 speaker fixing screws to detach the speaker.
5. Remove the 6 cabinet B fixing screws.
6. Open in the direction of the arrow and detach the cabinet B.
7. Remove the 4 stand reinforcement angle fixing screws. Remove the connector (MF) to detach the stand reinforcement angle.

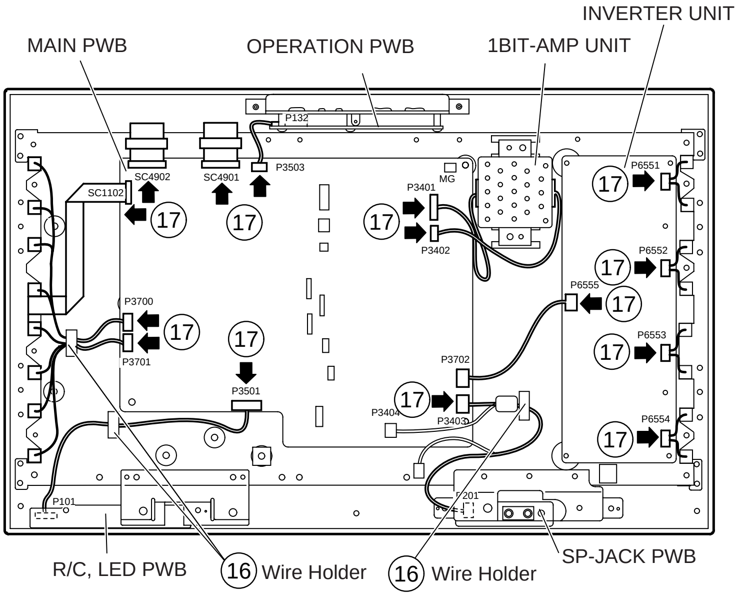

Cabnet B
Terminal Cover (R)
Control Panel (Top Cover)
5
Cabnet A
2
Remove the antenna cable
6
1
2
3
2
4
Stand
Terminal Cover (C)
Speaker
Terminal Cover (L)

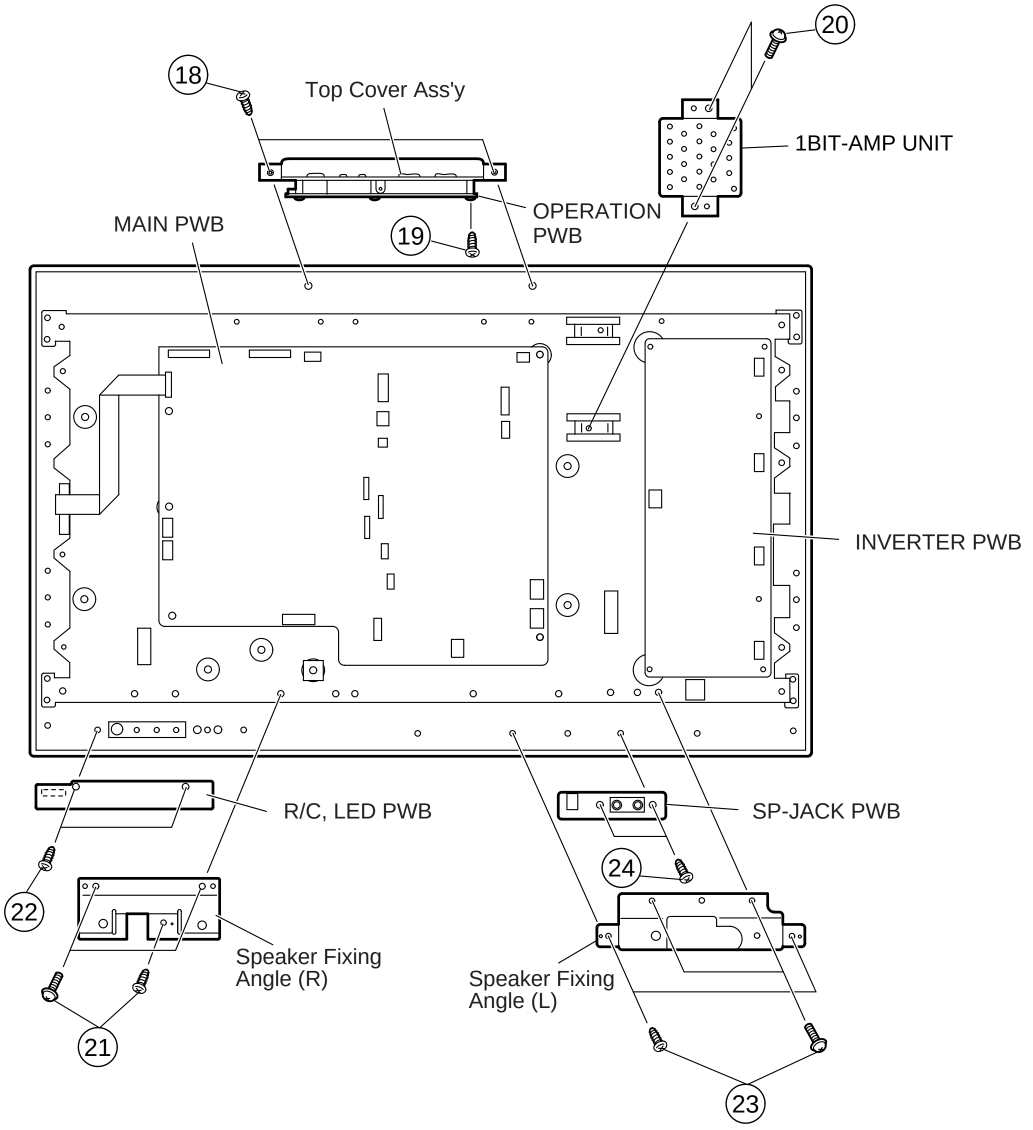

7
Fan
Shield Tape
Tape
Stand Reinforcement Angle
Connector(MF)
P3705

8. Remove the tape for fixing the wire.
9. Remove the individual connectors from the AV PWB and EU-DIGITAL PWB.
10. Remove the 4 AV PWB terminal fixing screws.
11. Remove the 2 EU-DIGITAL PWB terminal fixing screws and the PC card cover.
12. Disconnect the connector connecting the EXT-SP TERMINAL PWB and MAIN PWB. Then loosen the PWB fixing claw to detach the EXT-SP TERMINAL PWB.
13. Remove the 3 AV PQB fixing screws to detach the AV PWB. Then remove the cassis frame cover from the AV PWB.
14. Remove the 4 EU-DIGITAL PWB fixing screws to detach the EU-DIGITAL PWB.
15. Remove the 7 chassis frame fixing screws to detach the chassis frame.

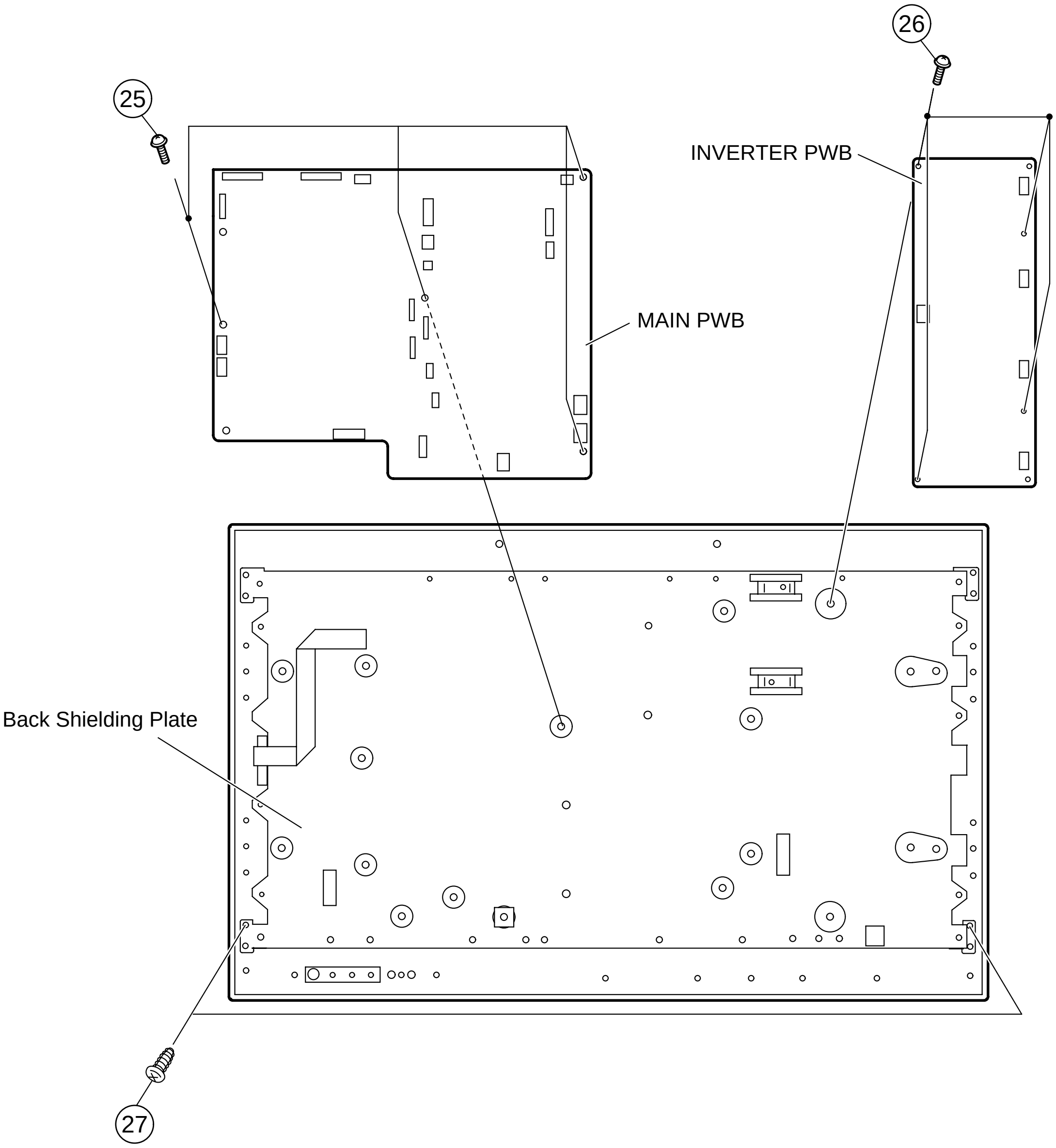

AV PWB
EU-DIGITAL PWB
MAIN PWB
OPERATION PWB
INVERTER PWB
MG
SC2500
1600
P3704
SC2502
1503
SC903
SC2503
SC904
SC2504
SC905
SC2501
P2501
P3703
MG
P904
P701
9
R/C, LED PWB
SP-JACK PWB
EXT-SP TERMINAL PWB
14
13
AV PWB
15
Chassis
Frame Cover
EU-DIGITAL PWB
10
11
PC Card Cover
Chassis Frame
12
P202
EXT-SP TERMINAL PWB
MAIN PWB
P404

16. Open the wire holder and disconnect the connection cord.
17. Disconnect each connector from each PWB.
18. Remove the 2 top cover ass'y fixing screws to take out the top cover ass'y (OPERATION PWB).
19. Remove the 2 OPERATION PWB fixing screws from the top cover ass'y to detach the OPERATION PWB.
20. Remove the 2 1BIT-AMP UNIT fixing screws to detach the 1 BIT-AMP UNIT.
21. Remove the 3 speaker fixing angle (R) fixing screws to detach the speaker fixing angle (R).
22. Remove the 2 R/C, LED PWB fixing screws to detach the R/C, LED PWB.
23. Remove the 4 speaker fixing angle (L) fixing screws to detach the speaker fixing angle (L).
24. Remove the 2 speaker terminal PWB fixing screws to detach the speaker terminal PWB.


INVERTER UNIT
MAIN PWB
OPERATION PWB
1BIT-AMP UNIT
P132
SC4902
SC4901
P3503
SC1102
MG
P3401
P3402
P6551
P6552
P6555
P6553
P6554
P3700
P3701
P3501
P3702
P3404
P3403
P101
P201
17
R/C, LED PWB
16 Wire Holder
16 Wire Holder
SP-JACK PWB

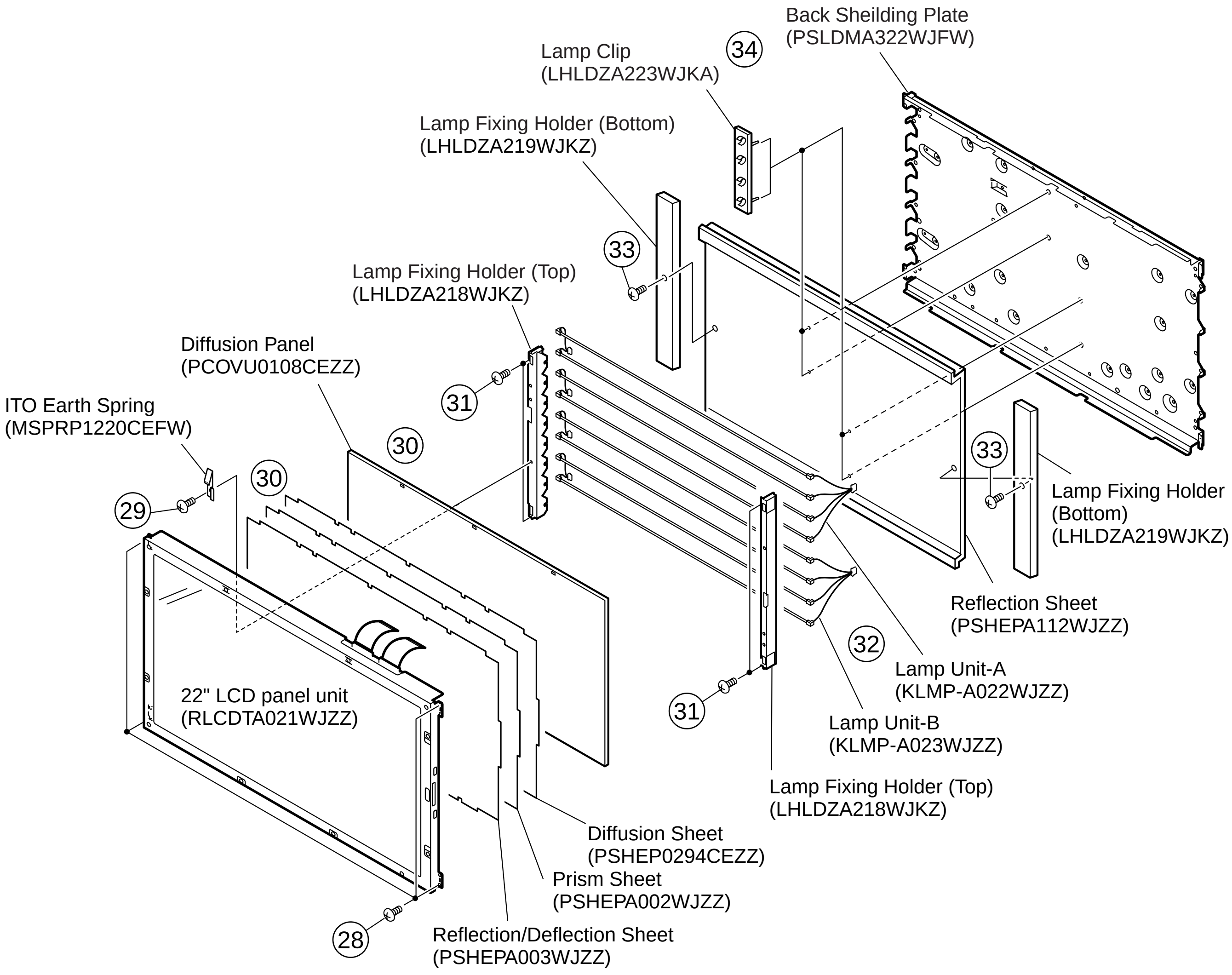

20
18
Top Cover Ass'y
1BIT-AMP UNIT
MAIN PWB
19
OPERATION PWB
INVERTER PWB
R/C, LED PWB
SP-JACK PWB
24
22
Speaker Fixing Angle (R)
Speaker Fixing Angle (L)
21
23

25. Remove the 4 MAIN PWB fixing screws to detach the MAIN PWB.
26. Remove the 4 INVERTER PWB fixing screws to detach the INVERTER PWB.
27. Remove the 2 LCD panel fixing screws to detach the LCD panel unit.

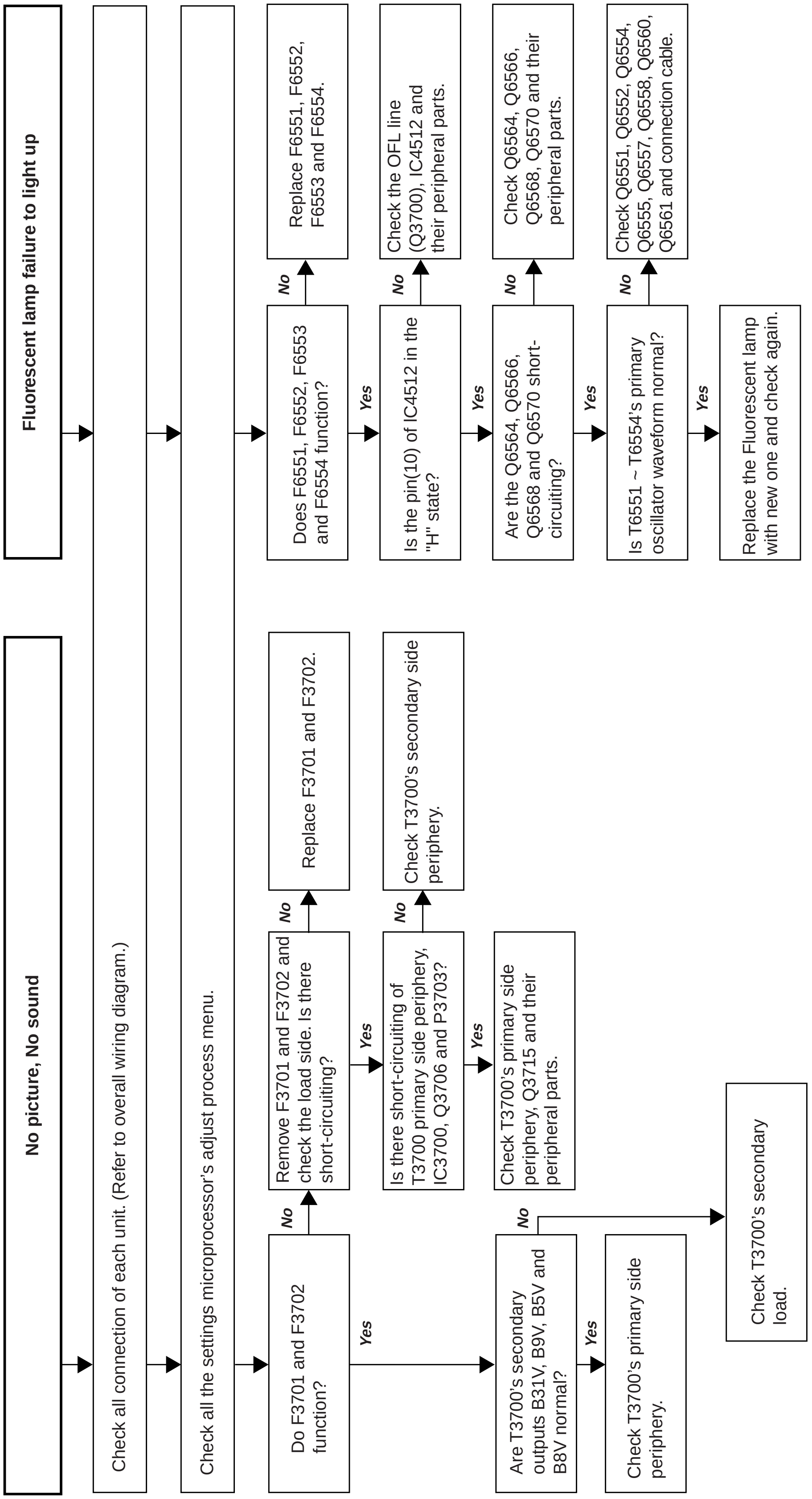

26
25
INVERTER PWB
MAIN PWB
Back Shielding Plate
27

- Cautions when handling the LCD panel
  1. Work in a clean room (relative humidity: 50% or more).
  2. The workers must wear an earth band.
  3. Do not expose it to shocks such as drop or vibration.
  4. Use an ionizer (within 30 cm).

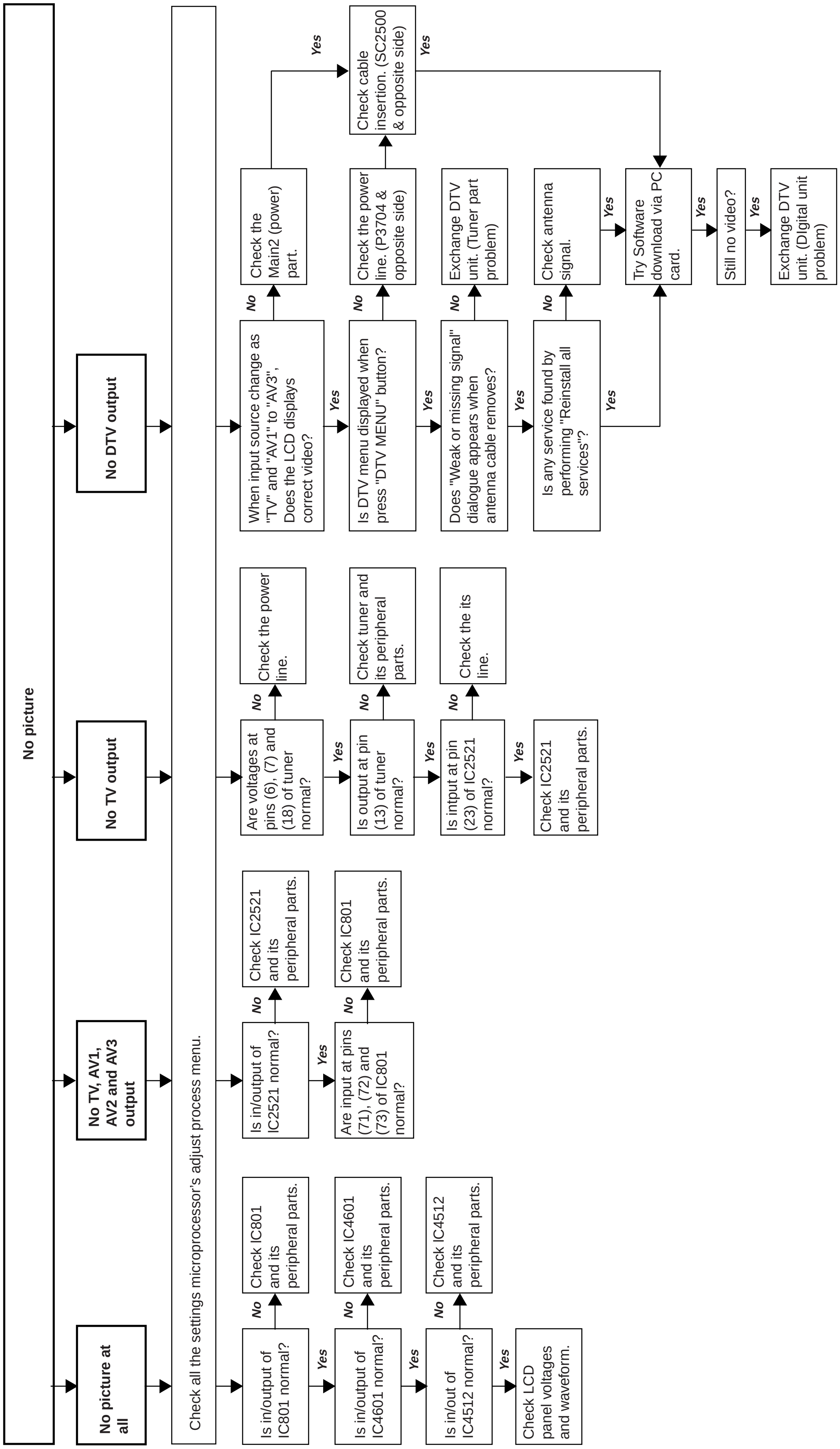
28. Remove the 4 LCD panel fixing screws to detach the LCD panel unit.
29. Remove the ITO earth fixing angle fixing screw to detach the ITO fixing angle.
30. Detach the reflection/polarization sheet, prism sheet, diffusion sheet, and diffusion plate.
31. Remove each 2 lamp fixing holder (upper) fixing screws to detach the lamp fixing holders (upper).
32. Detach the lamp units A and B.
33. Remove each 1 lamp fixing holder (lower) fixing screws to detach the lamp fixing holders (lower).
34. Detach the 2 lamp clips.


Back Sheilding Plate
(PSLDMA322WJFW)
Lamp Clip
(LHLDZA223WJKA)
34
Lamp Fixing Holder (Bottom)
(LHLDZA219WJKZ)
33
Lamp Fixing Holder (Top)
(LHLDZA218WJKZ)
Diffusion Panel
(PCOVU0108CEZZ)
31
ITO Earth Spring
(MSPRP1220CEFW)
30
30
29
33
Lamp Fixing Holder
(Bottom)
(LHLDZA219WJKZ)
Reflection Sheet
(PSHEPA112WJZZ)
32
Lamp Unit-A
(KLMP-A022WJZZ)
22" LCD panel unit
(RLCDTA021WJZZ)
31
Lamp Unit-B
(KLMP-A023WJZZ)
Lamp Fixing Holder (Top)
(LHLDZA218WJKZ)
Diffusion Sheet
(PSHEP0294CEZZ)
Prism Sheet
(PSHEPA002WJZZ)
28
Reflection/Deflection Sheet
(PSHEPA003WJZZ)

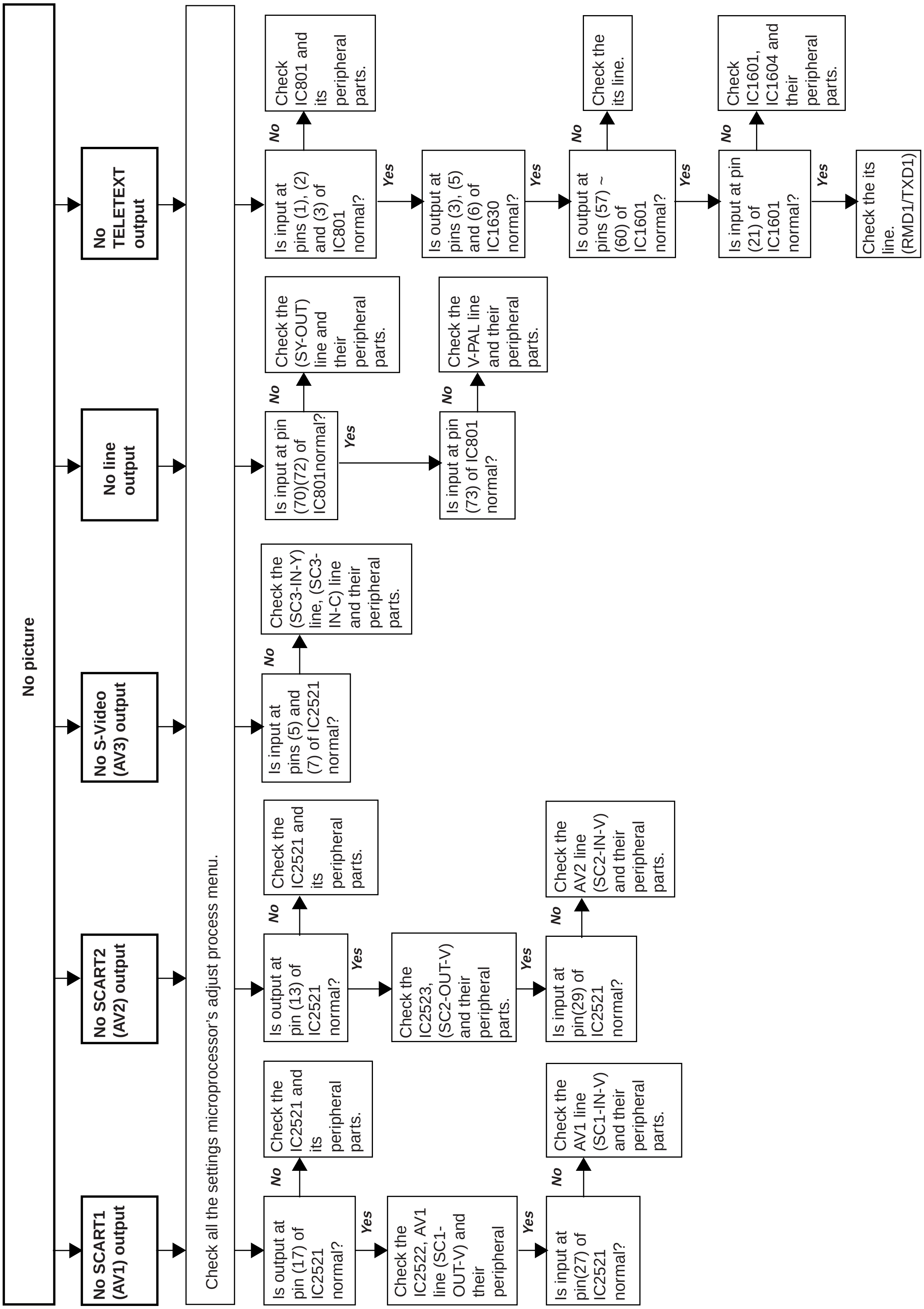
TROUBLE SHOOTING TABLE


No picture, No sound
Check all connection of each unit. (Refer to overall wiring diagram.)
Check all the settings microprocessor's adjust process menu.
Do F3701 and F3702 function?
No
Remove F3701 and F3702 and check the load side. Is there short-circuiting?
No
Replace F3701 and F3702.
Yes
Is there short-circuiting of T3700 primary side periphery, IC3700, Q3706 and P3703?
No
Check T3700's secondary side periphery.
Yes
Check T3700's primary side periphery, Q3715 and their peripheral parts.
Yes
Are T3700's secondary outputs B31V, B9V, B5V and B8V normal?
No
Check T3700's secondary load.
Yes
Check T3700's primary side periphery.
Fluorescent lamp failure to light up
Check all connection of each unit. (Refer to overall wiring diagram.)
Check all the settings microprocessor's adjust process menu.
Does F6551, F6552, F6553 and F6554 function?
No
Replace F6551, F6552, F6553 and F6554.
Yes
Is the pin(10) of IC4512 in the "H" state?
No
Check the OFL line (Q3700), IC4512 and their peripheral parts.
Yes
Are the Q6564, Q6566, Q6568 and Q6570 short-circuiting?
No
Check Q6564, Q6566, Q6568, Q6570 and their peripheral parts.
Yes
Is T6551 ~ T6554's primary oscillator waveform normal?
No
Check Q6551, Q6552, Q6554, Q6555, Q6557, Q6558, Q6560, Q6561 and connection cable.
Yes
Replace the Fluorescent lamp with new one and check again.

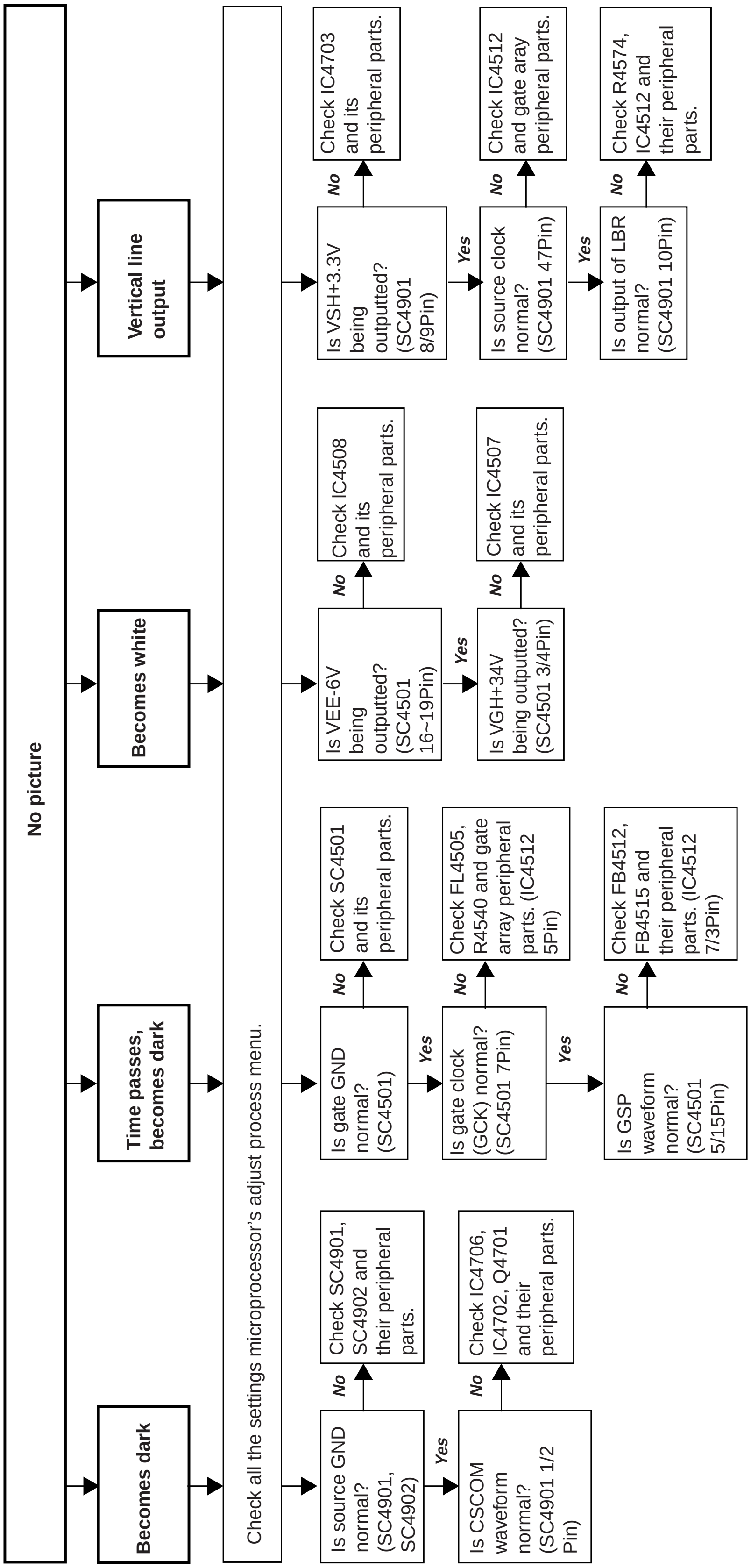
TROUBLE SHOOTING TABLE (Continued)


No picture
No picture at all
No TV, AV1, AV2 and AV3 output
No TV output
No DTV output
Check all the settings microprocessor's adjust process menu.
Is in/output of IC801 normal?
Check IC801 and its peripheral parts.
Is in/output of IC4601 normal?
Check IC4601 and its peripheral parts.
Is in/out of IC4512 normal?
Check IC4512 and its peripheral parts.
Check LCD panel voltages and waveform.
Is in/output of IC2521 normal?
Check IC2521 and its peripheral parts.
Are input at pins (71), (72) and (73) of IC801 normal?
Check IC801 and its peripheral parts.
Are voltages at pins (6), (7) and (18) of tuner normal?
Check the power line.
Is output at pin (13) of tuner normal?
Check tuner and its peripheral parts.
Is intput at pin (23) of IC2521 normal?
Check the its line.
Check IC2521 and its peripheral parts.
When input source change as "TV" and "AV1" to "AV3", Does the LCD displays correct video?
Check the Main2 (power) part.
Check cable insertion. (SC2500 & opposite side)
Is DTV menu displayed when press "DTV MENU" button?
Check the power line. (P3704 & opposite side)
Does "Weak or missing signal" dialogue appears when antenna cable removes?
Exchange DTV unit. (Tuner part problem)
Is any service found by performing "Reinstall all services"?
Check antenna signal.
Try Software download via PC card.
Still no video?
Exchange DTV unit. (DIgital unit problem)
Yes
No

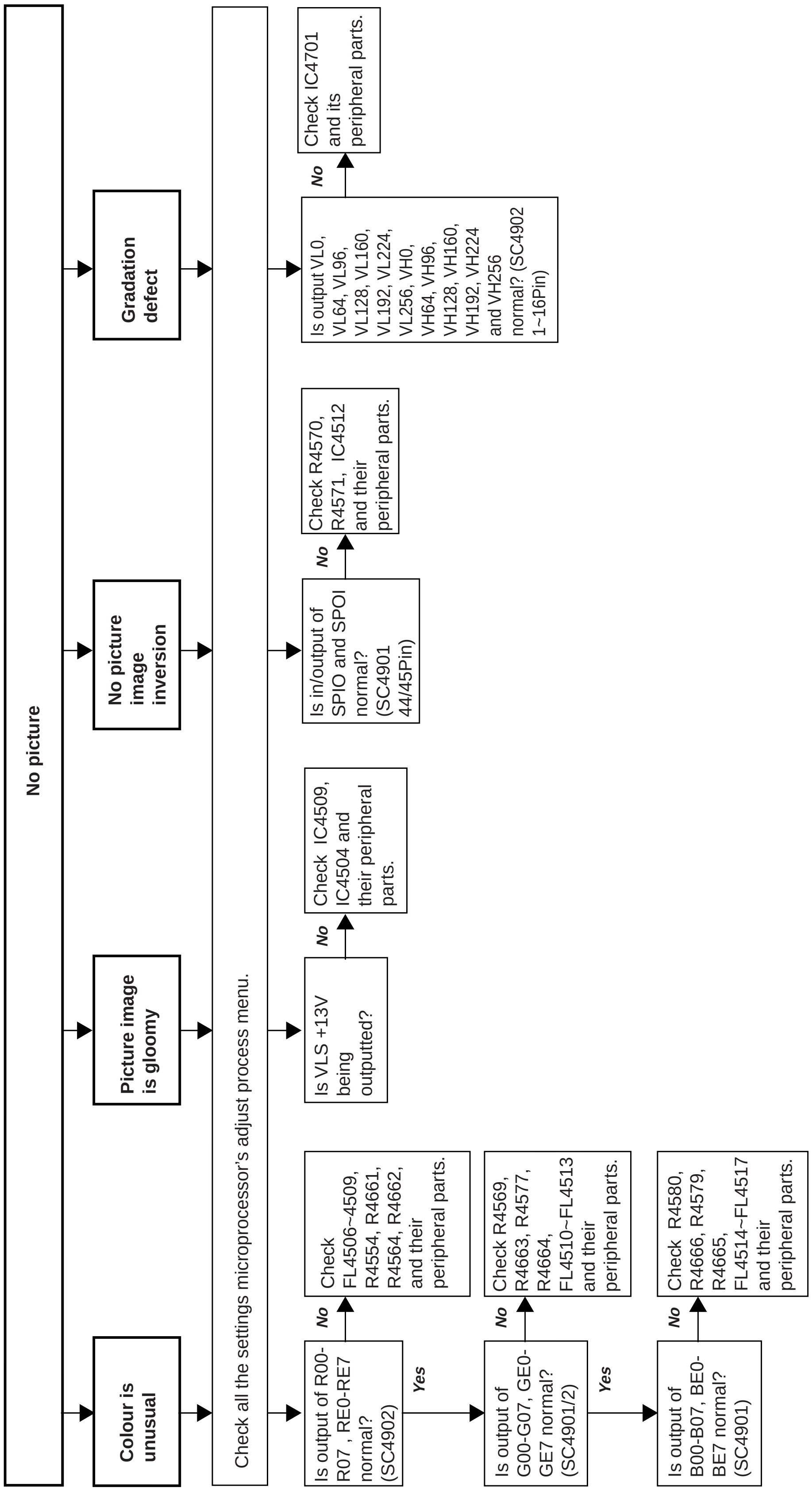
TROUBLE SHOOTING TABLE (Continued)


No picture
Check all the settings microprocessor's adjust process menu.
No SCART1 (AV1) output
Is output at pin (17) of IC2521 normal?
No
Check the IC2521 and its peripheral parts.
Yes
Check the IC2522, AV1 line (SC1-OUT-V) and their peripheral
Yes
Is input at pin(27) of IC2521 normal?
No
Check the AV1 line (SC1-IN-V) and their peripheral parts.
No SCART2 (AV2) output
Is output at pin (13) of IC2521 normal?
No
Check the IC2521 and its peripheral parts.
Yes
Check the IC2523, (SC2-OUT-V) and their peripheral parts.
Yes
Is input at pin(29) of IC2521 normal?
No
Check the AV2 line (SC2-IN-V) and their peripheral parts.
No S-Video (AV3) output
Is input at pins (5) and (7) of IC2521 normal?
No
Check the (SC3-IN-Y) line, (SC3-IN-C) line and their peripheral parts.
No line output
Is input at pin (70)(72) of IC801normal?
No
Check the (SY-OUT) line and their peripheral parts.
Yes
Is input at pin (73) of IC801 normal?
No
Check the V-PAL line and their peripheral parts.
No TELETEXT output
Is input at pins (1), (2) and (3) of IC801 normal?
No
Check IC801 and its peripheral parts.
Yes
Is output at pins (3), (5) and (6) of IC1630 normal?
Yes
Is output at pins (57) ~ (60) of IC1601 normal?
No
Check the its line.
Yes
Is input at pin (21) of IC1601 normal?
No
Check IC1601, IC1604 and their peripheral parts.
Yes
Check the its line. (RMD1/TXD1)

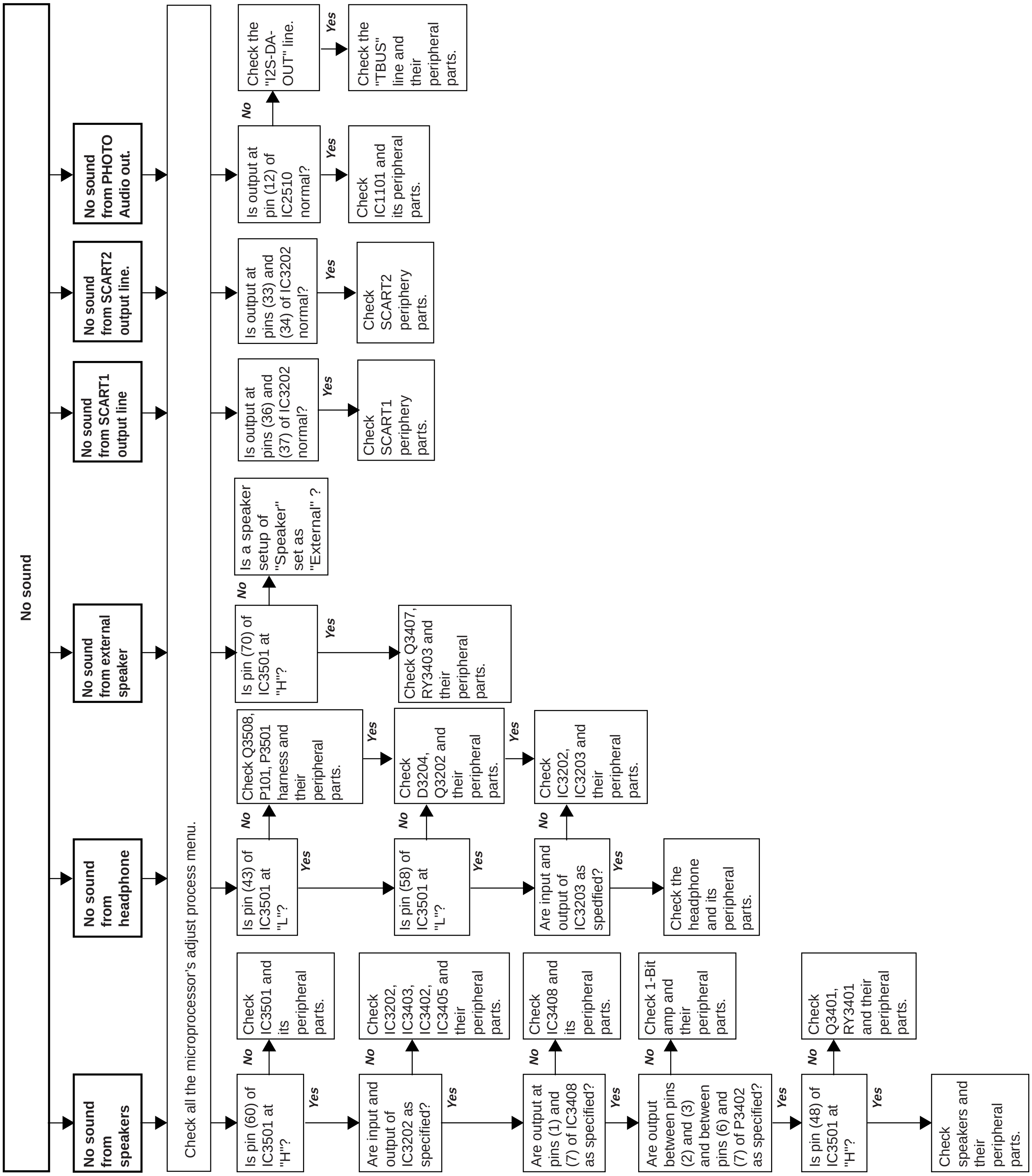
TROUBLE SHOOTING TABLE (Continued)


No picture
Becomes dark
Time passes, becomes dark
Becomes white
Vertical line output
Check all the settings microprocessor's adjust process menu.
Is source GND normal? (SC4901, SC4902)
No
Check SC4901, SC4902 and their peripheral parts.
Yes
Is CSCOM waveform normal? (SC4901 1/2 Pin)
No
Check IC4706, IC4702, Q4701 and their peripheral parts.
Is gate GND normal? (SC4501)
No
Check SC4501 and its peripheral parts.
Yes
Is gate clock (GCK) normal? (SC4501 7Pin)
No
Check FL4505, R4540 and gate array peripheral parts. (IC4512 5Pin)
Yes
Is GSP waveform normal? (SC4501 5/15Pin)
No
Check FB4512, FB4515 and their peripheral parts. (IC4512 7/3Pin)
Is VEE-6V being outputted? (SC4501 16~19Pin)
No
Check IC4508 and its peripheral parts.
Yes
Is VGH+34V being outputted? (SC4501 3/4Pin)
No
Check IC4507 and its peripheral parts.
Is VSH+3.3V being outputted? (SC4901 8/9Pin)
No
Check IC4703 and its peripheral parts.
Yes
Is source clock normal? (SC4901 47Pin)
No
Check IC4512 and gate aray peripheral parts.
Yes
Is output of LBR normal? (SC4901 10Pin)
No
Check R4574, IC4512 and their peripheral parts.

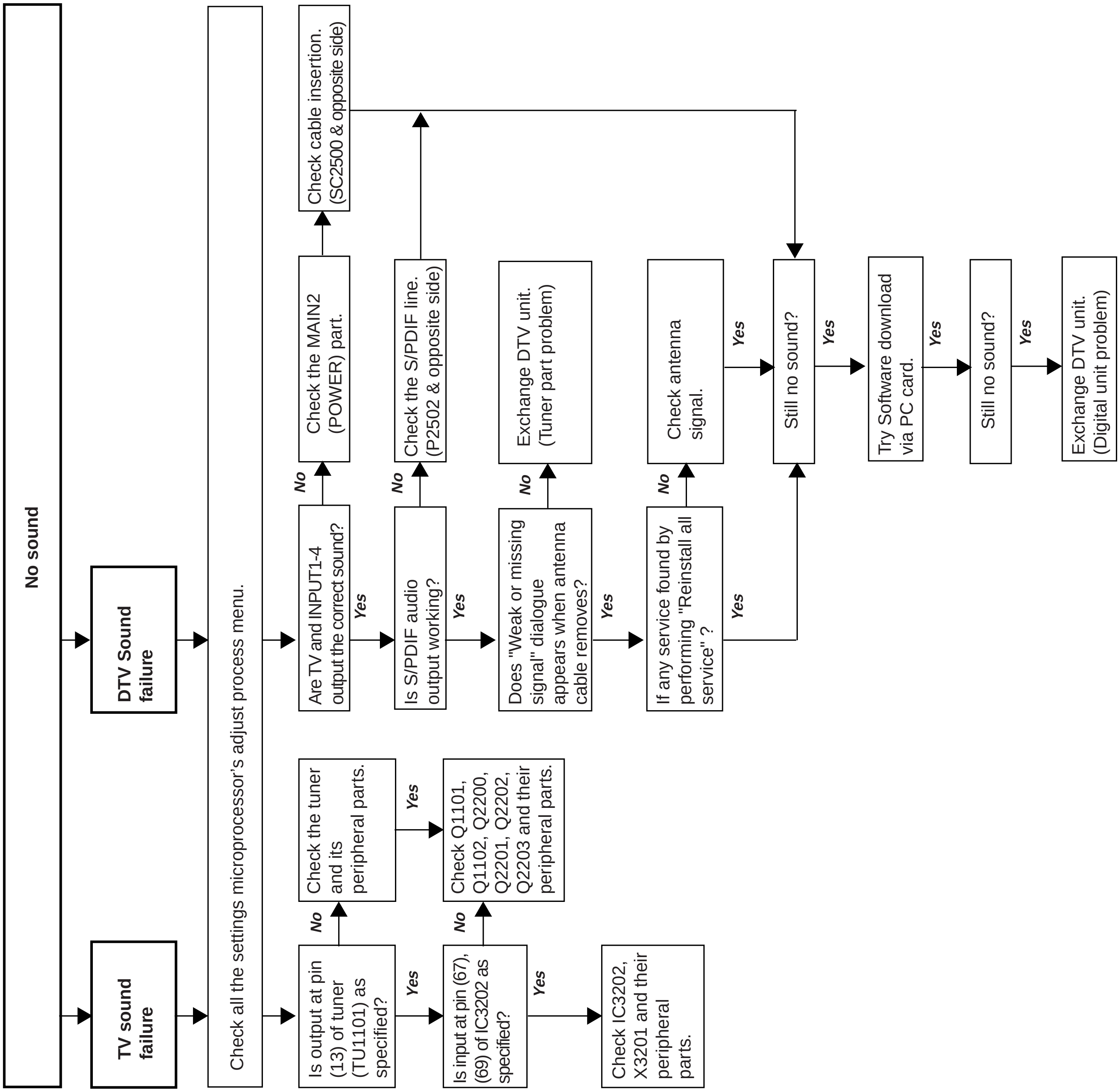
TROUBLE SHOOTING TABLE (Continued)


No picture
Colour is unusual
Picture image is gloomy
No picture image inversion
Gradation defect
Check all the settings microprocessor's adjust process menu.
Is output of R00-R07 , RE0-RE7 normal? (SC4902)
No
Check FL4506~4509, R4554, R4661, R4564, R4662, and their peripheral parts.
Yes
Is output of G00-G07, GE0-GE7 normal? (SC4901/2)
No
Check R4569, R4663, R4577, R4664, FL4510~FL4513 and their peripheral parts.
Yes
Is output of B00-B07, BE0-BE7 normal? (SC4901)
No
Check R4580, R4666, R4579, R4665, FL4514~FL4517 and their peripheral parts.
Is VLS +13V being outputted?
No
Check IC4509, IC4504 and their peripheral parts.
Is in/output of SPIO and SPOI normal? (SC4901 44/45Pin)
No
Check R4570, R4571, IC4512 and their peripheral parts.
Is output VL0, VL64, VL96, VL128, VL160, VL192, VL224, VL256, VH0, VH64, VH96, VH128, VH160, VH192, VH224 and VH256 normal? (SC4902 1~16Pin)
No
Check IC4701 and its peripheral parts.

TROUBLE SHOOTING TABLE (Continued)


No sound
No sound from speakers
No sound from headphone
No sound from external speaker
No sound from SCART1 output line
No sound from SCART2 output line.
No sound from PHOTO Audio out.
Check all the microprocessor's adjust process menu.
Is pin (60) of IC3501 at "H"?
No
Check IC3501 and its peripheral parts.
Yes
Are input and output of IC3202 as specified?
No
Check IC3202, IC3403, IC3402, IC3405 and their peripheral parts.
Yes
Are output at pins (1) and (7) of IC3408 as specified?
No
Check IC3408 and its peripheral parts.
Yes
Are output between pins (2) and (3) and between pins (6) and (7) of P3402 as specified?
No
Check 1-Bit amp and their peripheral parts.
Yes
Is pin (48) of IC3501 at "H"?
No
Check Q3401, RY3401 and their peripheral parts.
Yes
Check speakers and their peripheral parts.
Is pin (43) of IC3501 at "L"?
No
Check Q3508, P101, P3501 harness and their peripheral parts.
Yes
Check D3204, Q3202 and their peripheral parts.
Yes
Check IC3202, IC3203 and their peripheral parts.
Yes
Is pin (58) of IC3501 at "L"?
No
Yes
Are input and output of IC3203 as spedfied?
No
Yes
Check the headphone and its peripheral parts.
Is pin (70) of IC3501 at "H"?
No
Is a speaker setup of "Speaker" set as "External" ?
Yes
Check Q3407, RY3403 and their peripheral parts.
Is output at pins (36) and (37) of IC3202 normal?
Yes
Check SCART1 periphery parts.
Is output at pins (33) and (34) of IC3202 normal?
Yes
Check SCART2 periphery parts.
Is output at pin (12) of IC2510 normal?
Yes
Check IC1101 and its peripheral parts.
No
Check the "I2S-DA-OUT" line.
Yes
Check the "TBUS" line and their peripheral parts.

TROUBLE SHOOTING TABLE (Continued)


No sound
DTV Sound failure
TV sound failure
Check all the settings microprocessor's adjust process menu.
Are TV and INPUT1-4 output the correct sound?
No
Check the MAIN2 (POWER) part.
Check cable insertion. (SC2500 & opposite side)
Yes
Is S/PDIF audio output working?
No
Check the S/PDIF line. (P2502 & opposite side)
Yes
Does "Weak or missing signal" dialogue appears when antenna cable removes?
No
Exchange DTV unit. (Tuner part problem)
Yes
If any service found by performing "Reinstall all service" ?
No
Check antenna signal.
Yes
Yes
Still no sound?
Yes
Try Software download via PC card.
Yes
Still no sound?
Yes
Exchange DTV unit. (Digital unit problem)
Is output at pin (13) of tuner (TU1101) as specified?
No
Check the tuner and its peripheral parts.
Yes
Check Q1101, Q1102, Q2200, Q2201, Q2202, Q2203 and their peripheral parts.
Yes
Is input at pin (67), (69) of IC3202 as specified?
No
Yes
Check IC3202, X3201 and their peripheral parts.

ADJUSTING PROCEDURES

The best adjustment is made before shipping. If any position deviation is found or after part replacement is performed, adjust as follows.

Preparation for adjustments

Use the dedicated AC adaptor or stable DC power supply.
AC adaptor: UADP-A056WJPZ
DC Power supply: 13V 7.0A

1. Adjustment procedure

- +B adjustment (adjustment at 5 V and 13V) → Enter the adjustment process mode.
→ Counter-bias adjustment.→ TAMP (contrast) adjustment. → White balance adjustment at the TV input.

2.Entering the adjustment process mode

- During after-sales service, the “MAIN POWER” key is turned on while pushing the “TV/VIDEO” and “MENU” keys at the same time. (“K”, indicating the inspection processing mode, will be displayed at the upper left of the screen.)

→ Next, “CH (∨)” Key and “◿ (–)” keys are pushed at the same time. (The adjustment process mode screen will be brought up.) To exit the adjustment process mode, press the “STANDBY-OFF” or “MAIN POWER-OFF” key.

3. Key operation in the adjustment process mode

(1) Receiving channel selection

- The receiving channel UP/DOWN is performed with the “CH (∧)/(∨)” keys.
  One push......The UP/DOWN is performed per channel.
  Continuous push......The UP/DOWN search is performed until a next receivable station is found.
- Direct channel selection using the 0 - 9 and 100 keys.

(2) Various adjustments

- The adjustment is preformed for each item with the cursor “ (▲)/(▼)” keys, cursor “ (◀)/(▶)” keys, “OK” key and “RETURN” key (LCD TV set or remote control).
- The adjustment item makes a toggle operation with the “(▼)” key input. (Next item)
- If the “(▼)” key is input while the bottom item is selected, it moves to the top item on the next page.
- When the cursor “(▲)” key is pressed, the item selected will move up to the previous item.
- When the “◿(+)/(–)” keys or the cursor “(◀)/(▶)” keys is pressed, the value of the selected item will be changed up or down.

(3) Item selection

- If the item on the second page of the first layer is not I2C DATA and the “OK” key (the cursor “(◀)/(▶)” keys or the “◿(+)/(–)” keys can also be used) is pressed, the top of each first page of the second layer will appear.
- To return from the second layer to the first layer, press the “RETURN” key.

4. Adjustment

(1) +B adjustment (R3717)

a) Receive the standard colour bar signal.

b) Connect a digital voltage meter to TP3722.
Adjust the voltage to 5.00V±0.02V using R3717 (trimming VR). Specified value: 5.00V±0.02V

Note: Since the reference voltage for all of the supply voltages is 5V, make sure you set the 5.00V adjustment accurately.

(2) +B adjustment (R4525)

a) Receive the standard colour bar signal.

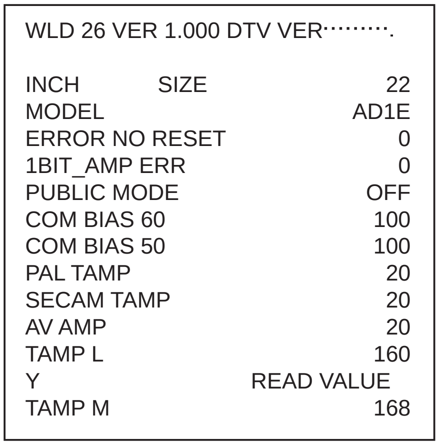
b) Connect a digital voltage meter to TP4531.
Adjust the voltage to 13.00V±0.05V using R4525 (trimming VR). Specified value: 13.00V±0.05V

Note: Since this is the reference voltage for the power supply for gradation, make sure you perform this adjustment accurately.

(3) Counter-bias adjustment

- This adjustment minimizes the flicker on the screen.
- To set the COM BIAS shown on the first page of the adjustment process, perform this adjustment at 50 Hz and 60 Hz, respectively.

a) Refer to the previous item **2** on page 22 to **Entering the adjustment process mode**.
The first page of the adjustment process, shown in the diagram on the right (Fig. 3-1), will be brought up.



```
WLD 26 VER 1.000 DTV VER·········.

INCH          SIZE              22
MODEL                         AD1E
ERROR NO RESET                   0
1BIT_AMP ERR                     0
PUBLIC MODE                    OFF
COM BIAS 60                    100
COM BIAS 50                    100
PAL TAMP                        20
SECAM TAMP                      20
AV AMP                          20
TAMP L                         160
Y                       READ VALUE
TAMP M                         168
```

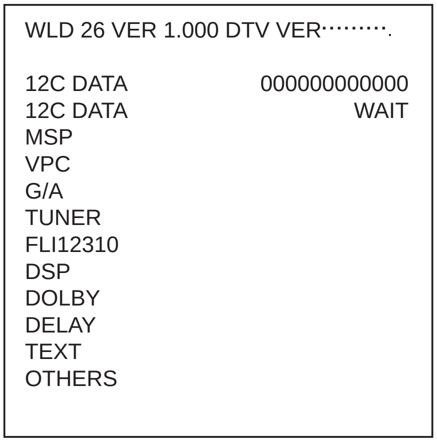
Fig. 3-1
First page of the first layer of the adjustment process

b) Select [G/A] on the second page of the adjustment process using the cursor “(▼)” key, and press the “OK” key (Fig. 3-2). (The second layer item appears.)
- Next, press the cursor ”(▼)” key twice, to bring up the third page of the second layer (Fig.3-3).
- Select [G/A TEST PATTERN 1], on the third page.(In this case, the set value should be [0].)
- Press the cursor “(▶)” key repeatedly to set the value to [14].(In this case, [14] is [dot reverse flicker pattern 2].)
- Press the “RETURN” key and the cursor “(▲)” key to return to the first page of the adjustment process.

c) Select [COM BIAS 50] on the first page, using the cursor “(▲)/(▼)” keys.

d) Press the cursor “(◀)/(▶)” keys repeatedly. Stop pressing it when the flicker on the screen is at the lowest level possible. (In this example, the set value [COM BIAS 50] is [105].)

e) Next, select the first page, [COM BIAS 60], using the cursor “(▲)/(▼)” keys.
Press the cursor “(◀)/(▶)” keys repeatedly. Stop pressing it when the flicker on the screen is at the lowest level possible. (In this example, the set value [COM BIAS 60] is [108].)



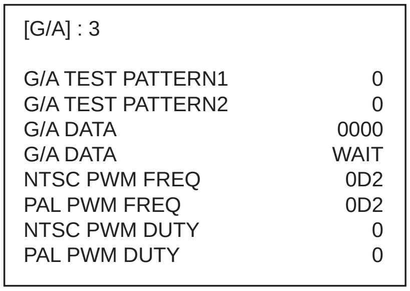
```
WLD 26 VER 1.000 DTV VER·········.

12C DATA              000000000000
12C DATA                      WAIT
MSP
VPC
G/A
TUNER
FLI12310
DSP
DOLBY
DELAY
TEXT
OTHERS
```

Fig. 3-2
Second page of the first layer of the adjustment process

f) Press the cursor “(▼)” key and the “OK” key again, and select [G/A TEST PATTERN 1], on the third page of the [G/A] second layer on the second page. Then, use the cursor “(◀)/(▶)” keys to return the setting from [14] to [0].

g) Press the “RETURN” key and the “(▲)/(▼)” keys to return to the first page of the adjustment process.

h) To exit the adjustment process mode, press the “STANDBY-OFF” or “MAIN POWER-OFF” key.



[G/A] : 3

G/A TEST PATTERN1	0
G/A TEST PATTERN2	0
G/A DATA	0000
G/A DATA	WAIT
NTSC PWM FREQ	0D2
PAL PWM FREQ	0D2
NTSC PWM DUTY	0
PAL PWM DUTY	0

Fig. 3-3

Third page of the [G/A] second layer

(4) TAMP adjustment

The screen contrast is adjusted.

a) Bring up the pattern shown in Fig. 4-2 using a signal or an RF signal generator that is producing the standard colour bars.

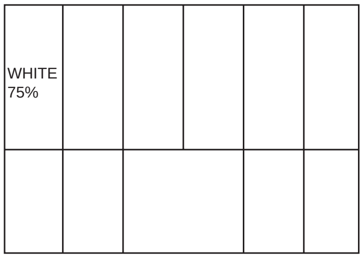


Fig. 4-1

White 75% half-colour bar signal

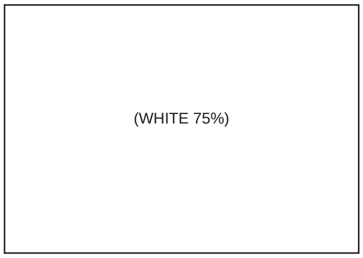


Fig. 4-2

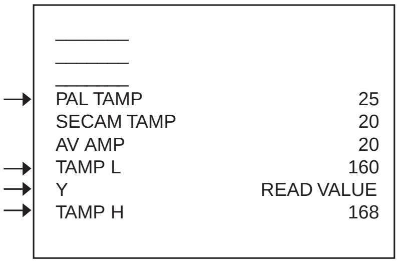
TAMP adjustment pattern (PAL r = 1.00)

b) Refer to the item **2** on page 22 to **Entering the adjustment process mode**. This will bring up the first page of the adjustment process, shown in Fig. 4-3.

c) There is a [Y] shown on the bottom of the first page. See if the setting is between [160] and [168]. If it is, it is OK. However, if the value is outside this range, it is necessary to readjust it.

d) Select [PAL TAMP] using the cursor “(▲)/(▼)” keys.

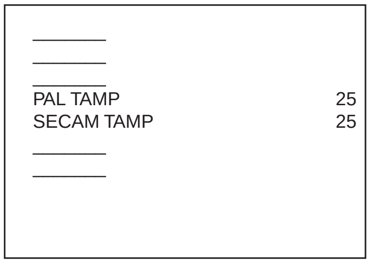
e) Press the cursor “(▲)/(▼)” keys and adjust the value of [Y] so that it is between [160] and [168]. (In this example, the value of PAL TAMP is [25].)



PAL TAMP	25
SECAM TAMP	20
AV AMP	20
TAMP L	160
Y	READ VALUE
TAMP H	168

Fig. 4-3

First page of the adjustment process



PAL TAMP	25
SECAM TAMP	25

Fig. 4-4

First page of the adjustment process

f) Next, select [SECAM TAMP] using the cursor “(▲)/(▼)” keys.
- Use the cursor “(◀)/(▶)” keys to manually set [SECAM TAMP] to the same value as previously seen in PAL TAMP, [25] in the example above.

h) Press the “(▲)/(▼)” keys to escape.

i) To exit the adjustment process mode, press the “STANDBY-OFF” or “MAIN POWER-OFF” key.

(5) White balance adjustment

This TV input white balance adjusted.
This adjustment is performed when the LCD is replaced and the white balance must be set.

a) Bring up the pattern shown in Fig. 5-1 on AV1, AV2 or AV3 using a signal generator .

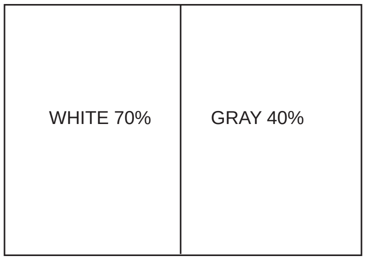
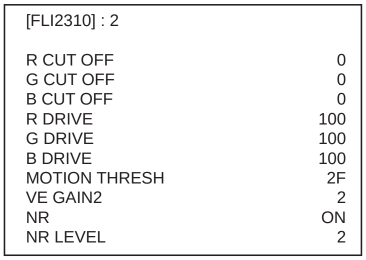


Fig. 5-1
White balance adjustment pattern
(PAL signal)



```
[FLI2310] : 2

R CUT OFF          0
G CUT OFF          0
B CUT OFF          0
R DRIVE          100
G DRIVE          100
B DRIVE          100
MOTION THRESH     2F
VE GAIN2           2
NR                ON
NR LEVEL           2
```

Fig. 5-2
Adjustment process menu [FLI2310]
Screen from the second page of the second layer

b) Refer to the item **2** on page22 to **Entering the adjustment process mode**.

c) Use the cursor "(▲)/(▼)" keys to bring up the second page. Select [FLI2310] using the cursor "(▲)/(▼)" keys, and then press the "OK" key.
You can also press the cursor "(▼)" key to bring up the second page of the second layer.
- In this case, although the screen from the second page of [FLI2310] is brought up (shown in Fig. 5-2), make sure the CUT OFF settings for [R], [G], and [B] are [0] and the DRIVE settings for [R], [G], and [B] are [100].
  If they are not [0] and [100], set them.
- Use the cursor "(◀)/(▶)" key to set them to [0] and [100].

d) Prepare and install a standard luminance meter (for example, a Minolta CA-110).

e) Use the cursor "(▲)/(▼)" keys to bring up the second page. Select "FLI2310", and then press the "OK" key. Press the cursor "(▼)" key to bring up the second page of the second layer.

f) Fig. 5-3 shows the standard adjustment value for the white balance.

g) Adjust the chromaticity of x and y for the six CUT OFF and DRIVE colour items on the screen shown in Fig.5-2. Use the cursor "(◀)/(▶)" keys so that the values shown for White 70% and Gray 40% are the same as the values shown in Fig. 5-3.
- In this case, each of the set values of R, G, and B is out of [0] or [100].

	x	y	y(ref)
WHITE 70%	0.278	0.283	154
GRAY 40%	0.257	0.264	1.797

Adjustment range ±0.002
Inspection range ±0.003

Fig. 5-3
White balance adjustment values

*1.The adjustment should be performed after a 30-minute aging.
*2.The CUT OFF value should be adjusted within the range of ±0 ~ 25.
The DRIVE value should be adjusted within the range of ±0 ~ 25.

h) To exit the adjustment process mode, press the "STANDBY-OFF" or "MAIN POWER-OFF" key.

5. Lamp error detection

1) Function description

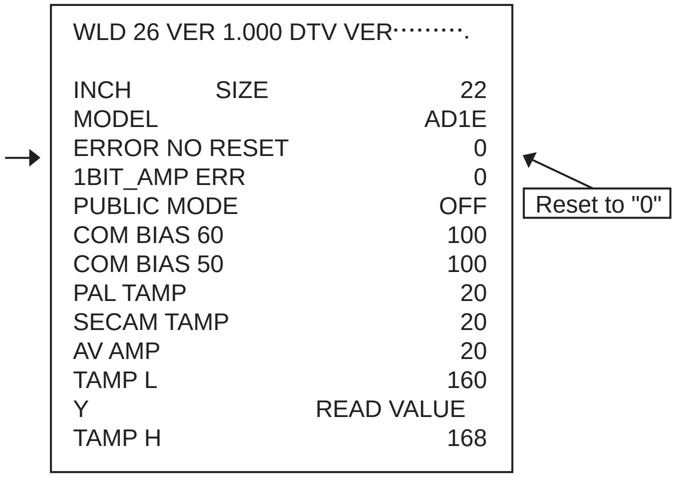
This LCD colour television has a function (lamp error detection) that turns off the power automatically, for safety, if a problem occurs with a lamp or a lamp circuit.
If there is a problem with a lamp or a lamp circuit or if a lamp error is detected for some other cause, the following will occur.

(1) The power is turned off about 15 seconds after the power to the TV is turned on. (The power LED on the front of the TV will be changed from green to red, and it will flash three times repeatedly.)
(2) If the protective function described in (1) is repeatedly activated five consecutive times, you will not be able to turn on the power. (The red power LED will flash three times, repeatedly.)

2) Countermeasures

1. Confirmation after the lamp error detection is deactivated
   When the power is turned off due to the lamp error detection function as described above, turn off the [power] while the power LED is red. Then, when the “TV/VIDEO” key and the “MENU” key are held down and the “MAIN POWER“ key is pressed, the [inspection process] mode will be entered and “K” will be displayed. Next, press the “◿(-)” key and the “(∨)” key at the same time to enter the [adjustment mode].
   Then, you can check the operation to see if the lamp and lamp circuit are abnormal.
   See if [ERROR NO RESET] in the first page of the adjustment is set to 1 or more.
   If it is 1 or more, it means that a lamp error has been detected.

2. Resetting the lamp error count
   After you have finished checking whether the lamp and lamp circuit are abnormal, reset the lamp error count.
   Select [ERROR NO RESET] in the first page of the adjustment process, and reset it to [0] using the cursor “(◀)/(▶)” keys.



```
WLD 26 VER 1.000 DTV VER·········.

INCH          SIZE              22
MODEL                         AD1E
ERROR NO RESET                   0
1BIT_AMP ERR                     0
PUBLIC MODE                    OFF
COM BIAS 60                    100
COM BIAS 50                    100
PAL TAMP                        20
SECAM TAMP                      20
AV AMP                          20
TAMP L                         160
Y                   READ VALUE
TAMP H                         168
```

Reset to "0"

Fig. 5-1

First page of the first layer of the adjustment process

6. Values set at factory shipment

ITEM	INITIAL VALUE
LAST CH	AV1
LAST POWER	OFF
FLASH BACK	AV1
Volume	20
Picture	
Contrast	30
Colour	0
Black level	0
Sharpness	0
Red-blue	0
Green	0
Tint	0
Sound	
Sound via	TV
Headph.vol	30
Loudsp. Sound	Stereo
Headph. Sound	Stereo
AV audio sig.	Sound1+2
Maximum volume.	60
Sound wide.	off
Treble	0
Bass	0
Balance	0
Speaker	Detachable
Programmes	
Country (E)	Germany
Country (K)	UK
Store prog. position	1
Name	ALL CH DELETE
Colour System	ALL CH PAL
Sound System (E)	ALL CH B/G
Sound System (K)	ALL CH 1
Skip	ALL CH OFF
Features	
Brightness	bright
Cool climate	off
V.Position	0
Rotate horizontally	off
Rotate vertically	off
Auto power off	off
Position	buttom
Sound info	yes
Time	no
Alarm time	no
Sleep time	no
Child lock	All CH Cancel
For all programmes (Child lock)	All no
Password (Child lock)	1234
AV Connections	
Signal type(AV1)	CVBS
AFC (AV1)	Mode1
AFC (AV2(Y/C))	Mode1
AFC (AV2(CVBS))	Mode1
Colour system(AV1)	Auto
Colour system(AV2(Y/C))	Auto
Colour system(AV2(CVBS))	Auto
AV control voltage	no
RGB on-screen display	no
For decoder connected to AV1	All CH Cancel
Sound from AV1	Dec
Timer functions	
Time	--:--:--
Switch off	no
Alarm timer	no
Alarm volume	0
Language (E)	Deutch
Language (K)	English
WIDE MODE	Panorama
WSS(Auto)	Panorama
Character set (TEXT)	West Europe

•ADJUSTMENT PROCESS

MODEL (E)	AD1E
MODEL (K)	AD1K
ERROR NO RESET	0
1BIT_AMP ERR	0
PUBLIC MODE	OFF

7. ADJUSTMENT PROCESS MODE MENU LIST

PAGE	FIRST LAYER ITEM	PAGE	SECOND LAYER ITEM	SETTING RANGE	INITIAL VALUE	DATA SETTING
1	INCH SIZE			22	22	FIX
	MODEL			AD1E/AD1K	AD1E	Toggle
	ERROR NO RESET			0～5	0	
	1BIT_AMP ERR			0～255	0	
	PUBLIC MODE			OFF/ON	OFF	Toggle
	COM BIAS 60			0～255	100	No Toggle
	COM BIAS 50			0～255	100	No Toggle
	PAL TAMP			0～63	20	No Toggle
	SECAM TAMP			0～63	20	No Toggle
	AV AMP			0～63	26	No Toggle
	TAMP L			0～255	160	No Toggle
	Y			0～255	Read Value	No Toggle
	TAMP H			0～255	168	No Toggle

PAGE		PAGE	SECOND LAYER ITEM	SETTING RANGE	INITIAL VALUE	DATA SETTING
2	I2C DATA			000000000000～	000000000000	No Toggle
	I2C DATA			WAIT/SEND	WAIT	No Toggle
2	MSP	1	TV EQ BAND1	-96～+96	0	No Toggle
			TV EQ BAND2	-96～+96	0	No Toggle
			TV EQ BAND3	-96～+96	-25	No Toggle
			TV EQ BAND4	-96～+96	0	No Toggle
			TV EQ BAND5	-96～+96	0	No Toggle
			AVC	OFF/8SEC/4SEC/2SEC/20MS	OFF	No Toggle
			CARRIER MUTE	ON/OFF	OFF	Toggle
			IGR THR	0A0～7F0	12D	No Toggle
		2	MSP DATA	0000000000～	0000000000	No Toggle
			MSP DATA	WAIT/SEND	WAIT	No Toggle
			PRESCALE FM/AM-M	0～127	31	No Toggle
			PRESCALE FM/AM-B	0～127	17	No Toggle
			PRESCALE FM/AM-D	0～127	17	No Toggle
			PRESCALE FM/AM-I	0～127	17	No Toggle
			PRESCALE FM/AM-L	0～127	17	No Toggle
			PRESCALE NICAM	0～127	31	No Toggle
			PRESCALE SCART	0～127	16	No Toggle
			FSP TEST	OFF/ON	OFF	Toggle
			0018H	00～7F	1D	No Toggle
			ONTA	0/1	1	No Toggle

PAGE	FIRST LAYER ITEM	PAGE	SECOND LAYER ITEM	SETTING RANGE	INITIAL VALUE	DATA SETTING
2	VPC	1	TV PAL CONT	0～63	47	No Toggle
			TV SECAM CONT	0～63	47	No Toggle
			AV PAL CONTRAST	0～63	45	No Toggle
			AV SECAM CONTRAST	0～63	45	No Toggle
			AV NTSC CONTRAST	0～63	45	No Toggle
			AV PAL-M CONTRAST	0～63	45	No Toggle
			AV PAL-N CONTRAST	0～63	45	No Toggle
			AV PAL60 CONTRAST	0～63	45	No Toggle
			H SCROLL 60	31～255	Every screen size	No Toggle
			H SCROLL 50	31～255	Every screen size	No Toggle
		2	CBW	0～3	1	No Toggle
			NOSEL	0～3	3	No Toggle
			DDR	0～3	1	No Toggle
			HDG	0～3	3	No Toggle
			VDG	0～3	0	No Toggle
			VPK	0～15	0	No Toggle
			KILVL	00～FF	08	No Toggle
			KILHY	00～FF	05	No Toggle
			VSYNC DELAY	0～255	132	No Toggle
			DVC0	-2048～+2047	-720	No Toggle
			AUTO LCK	0～4094	400	No Toggle
			TV COMB	0～1	1	Toggle
		3	VPC DATA	00000000～	00000000	No Toggle
			VPC DATA	WAIT/SEND	WAIT	No Toggle
			TEST PATTERN	0～6	0	No Toggle
			AUTO LDLY	-7～+1	0	No Toggle
			RGB NTSC CR	0～63	18	No Toggle
			RGB NTSC CB	0～63	16	No Toggle
			RGB NTSC TINT	-31～+31	0	No Toggle
			RGB NTSC BRIGHTNESS	-128～+127	71	No Toggle
			RGB NTSC CONTRAST	0～63	25	No Toggle
		4	RGB PAL CR	0～63	23	No Toggle
			RGB PAL CB	0～63	19	No Toggle
			RGB PAL TINT	-31～31	0	No Toggle
			RGB PAL BRIGHTNESS	-128～+127	71	No Toggle
			RGB PAL CONTRAST	0～63	25	No Toggle
			TXT BRIGHTNESS	-128～+127	68	No Toggle
			TXT CONTRAST	0～63	20	No Toggle
			TXT PEAKING FILTER	0～2	1	No Toggle
			TXT H-PEAKING	0～7	3	No Toggle
			DTV BRIGHTNESS	-128～+127	69	No Toggle
			DTV CONTRAST	0～63	23	No Toggle
			DTV PEAKING FILTER	0～2	0	No Toggle
			DTV H-PEAKING	0～7	1	No Toggle
		5	N358 AV COLOR	0～4094	1800	No Toggle
			N358 AV TINT	-512～+512	70	No Toggle
			N358 BRIGHTNESS	-128～+127	14	No Toggle
			N358 PEAKING FILTER	0～2	0	No Toggle
			N358 AV H-PEAKING	0～7	1	No Toggle
			N358 SFIF	0～4095	0	No Toggle
			N358 SCINC1	1024～4095	1500	No Toggle
			N358 AV LDLY	-7～+1	0	No Toggle

PAGE	FIRST LAYER ITEM	PAGE	SECOND LAYER ITEM	SETTING RANGE	INITIAL VALUE	DATA SETTING
2	VPC	6	N443 AV COLOR	0～4094	1800	No Toggle
			N443 AV TINT	-512～+512	70	No Toggle
			N443 BRIGHTNESS	-128～+127	14	No Toggle
			N443 PEAKING FILTER	0～2	0	No Toggle
			N443 AV H-PEAKING	0～7	1	No Toggle
			N443 SFIF	0～4095	0	No Toggle
			N443 SCINC1	1024～4095	1500	No Toggle
			N443 AV LDLY	-7～+1	-2	No Toggle
		7	PAL TV COLOR	0～4094	1750	No Toggle
			PAL AV COLOR	0～4094	1800	No Toggle
			PAL TV TINT	-512～+512	70	No Toggle
			PAL AV TINT	-512～+512	70	No Toggle
			PAL BRIGHTNESS	-128～+127	14	No Toggle
			PAL PEAKING FILTER	0～2	0	No Toggle
			PAL TV H-PEAKING	0～7	1	No Toggle
			PAL AV H-PEAKING	0～7	1	No Toggle
			PAL SFIF	0～4095	0	No Toggle
			PAL SCINC1	1024～4095	1500	No Toggle
			PAL TV LDLY	-7～+1	0	No Toggle
			PAL AV LDLY	-7～+1	-2	No Toggle
		8	SECAM TV COLOR	0～4094	1750	No Toggle
			SECAM AV COLOR	0～4094	1800	No Toggle
			SECAM TV TINT	-512～+512	70	No Toggle
			SECAM AV TINT	-512～+512	70	No Toggle
			SECAM BRIGHTNESS	-128～+127	14	No Toggle
			SECAM PEAKING FILTER	0～2	0	No Toggle
			SECAM TV H-PEAKING	0～7	1	No Toggle
			SECAM AV H-PEAKING	0～7	1	No Toggle
			SECAM SFIF	0～4095	0	No Toggle
			SECAM SCINC1	1024～4095	1500	No Toggle
			SECAM TV LDLY	-7～+1	-2	No Toggle
			SECAM AV LDLY	-7～+1	-2	No Toggle
		9	PAL-M AV COLOR	0～4094	1800	No Toggle
			PAL-M AV TINT	-512～+512	70	No Toggle
			PAL-M BRIGHTNESS	-128～+127	14	No Toggle
			PAL-M PEAKING FILTER	0～2	0	No Toggle
			PAL-M AV H-PEAKING	0～7	1	No Toggle
			PAL-M SFIF	0～4095	0	No Toggle
			PAL-M SCINC1	1024～4095	1500	No Toggle
			PAL-M AV LDLY	-7～+1	-2	No Toggle
		10	PAL-N AV COLOR	0～4094	1800	No Toggle
			PAL-N AV TINT	-512～+512	70	No Toggle
			PAL-N BRIGHTNESS	-128～+127	14	No Toggle
			PAL-N PEAKING FILTER	0～2	0	No Toggle
			PAL-N AV H-PEAKING	0～7	1	No Toggle
			PAL-N SFIF	0～4095	0	No Toggle
			PAL-N SCINC1	1024～4095	1500	No Toggle
			PAL-N AV LDLY	-7～+1	-2	No Toggle

PAGE	FIRST LAYER ITEM	PAGE	SECOND LAYER ITEM	SETTING RANGE	INITIAL VALUE	DATA SETTING
2	VPC	11	PAL60 AV COLOR	0～4094	1800	No Toggle
			PAL60 AV TINT	-512～+512	70	No Toggle
			PAL60 BRIGHTNESS	-128～+127	14	No Toggle
			PAL60 PEAKING FILTER	0～2	0	No Toggle
			PAL60 AV H-PEAKING	0～7	1	No Toggle
			PAL60 SFIF	0～4095	0	No Toggle
			PAL60 SCINC1	1024～4095	1500	No Toggle
			PAL60 AV LDLY	-7～+1	-2	No Toggle

PAGE	FIRST LAYER ITEM	PAGE	SECOND LAYER ITEM	SETTING RANGE	INITIAL VALUE	DATA SETTING
2	G/A	1	NTSC 01 (General setting)	00～7F	A0	Toggle
			NTSC 02 (Various setting)	00～FF	01	Toggle
			NTSC 03 (Output setting)	00～FF	CD	Toggle
			NTSC 04 (Output signal setting)	00～FF	50	Toggle
			NTSC 05 (Horisontal position)	00～FF	5C	Toggle
			NTSC 06 (PMUTE Horisontal position)	00～FF	60	Toggle
			NTSC 07 (Vertical position)	00～FF	0C	Toggle
			NTSC 08 (BDE SETTING)	00～FF	00	Toggle
			NTSC 09 (Panel lock)	00～FF	15	Toggle
			NTSC 0A (Bottom mask)	00～3F	00	Toggle
			NTSC 0B (Top mask)	00～3F	00	Toggle
			NTSC 0C (Left mask LBIT)	00～FF	00	Toggle
			NTSC 0D (Left mask HBIT)	00～0F	00	Toggle
			NTSC 0E (Right mask LBIT)	00～FF	84	Toggle
			NTSC 0F (Right mask HBIT)	00～0F	04	Toggle
			NTSC 10 (TEST Indication)	00～FF	70	Toggle
			NTSC 11 (TEST DISP DATA)	00～FF	FF	Toggle
			NTSC 12 (Flicker DISP DATA)	00～FF	80	Toggle
			NTSC 13 (R CUTOFF)	00～FF	00	Toggle
			NTSC 14 (G CUTOFF)	00～FF	00	Toggle
			NTSC 15 (B CUTOFF)	00～FF	00	Toggle
			NTSC 16 (SDRAM CLOCK)	00～FF	00	Toggle
			NTSC 17 (OSD CLK STOP)	00～FF	13	Toggle
			NTSC 18 (Clock setting)	00～FF	80	Toggle
			NTSC 60 (QS TEST)	00～FF	00	Toggle
			NTSC 61 (QS SETTING)	00～FF	00	Toggle
			NTSC 62 (QS IC TEST)	00～FF	00	Toggle
			NTSC 63 (TEST BER GRADATION)	00～FF	05	Toggle
			NTSC 64 (QS TEMPERATURE SETTING)	00～FF	86	Toggle
			NTSC F0 (PWM OUTPUT)	00～07	03	Toggle
			NTSC F1 (INV_OSC FREQ)	00～FF	3C	Toggle
			NTSC F2 (INV_OSC DUTY)	00～FF	1E	Toggle
			NTSC F3 (PWM FREQ LBIT)	00～FF	D2	Toggle
			NTSC F4 (PWM FREQ HBIT)	00～0F	00	Toggle
			NTSC F5 (PWM DUTY LBIT)	00～FF	00	Toggle
			NTSC F6 (PWM DUTY HBIT)	00～0F	00	Toggle

PAGE	FIRST LAYER ITEM	PAGE	SECOND LAYER ITEM	SETTING RANGE	INITIAL VALUE	DATA SETTING
2	G/A	2	PAL 01 (General setting)	00～7F	E0	Toggle
			PAL 02 (Various setting)	00～FF	01	Toggle
			PAL 03 (Output setting)	00～FF	CD	Toggle
			PAL 04 (Output signal setting)	00～FF	50	Toggle
			PAL 05 (Horisontal position)	00～FF	5C	Toggle
			PAL 06 (PMUTE Horisontal	00～FF	60	Toggle
			PAL 07 (Vertical position)	00～FF	0C	Toggle
			PAL 08 (BDE SETTING)	00～FF	00	Toggle
			PAL 09 (Panel lock)	00～FF	15	Toggle
			PAL 0A (Bottom mask)	00～3F	00	Toggle
			PAL 0B (Top mask)	00～3F	00	Toggle
			PAL 0C (Left mask LBIT)	00～FF	00	Toggle
			PAL 0D (Left mask HBIT)	00～0F	00	Toggle
			PAL 0E (Right mask LBIT)	00～FF	84	Toggle
			PAL 0F (Right mask HBIT)	00～0F	04	Toggle
			PAL 10 (TEST Indication)	00～FF	70	Toggle
			PAL 11 (TEST DISP DATA)	00～FF	FF	Toggle
			PAL 12 (Flicker DISP DATA)	00～FF	80	Toggle
			PAL 13 (R CUTOFF)	00～FF	00	Toggle
			PAL 14 (G CUTOFF)	00～FF	00	Toggle
			PAL 15 (B CUTOFF)	00～FF	00	Toggle
			PAL 16 (SDRAM CLOCK)	00～FF	00	Toggle
			PAL 17 (OSD CLK STOP)	00～FF	13	Toggle
			PAL 18 (Clock setting)	00～FF	80	Toggle
			PAL 60 (QS TEST)	00～FF	00	Toggle
			PAL 61 (QS SETTING)	00～FF	00	Toggle
			PAL 62 (QS IC TEST)	00～FF	00	Toggle
			PAL 63 (TEST BER)	00～FF	05	Toggle
			PAL 64 (QS TEMPERATURE SETTING)	00～FF	86	Toggle
			PAL F0 (PWM OUTPUT)	00～07	03	Toggle
			PAL F1 (INV_OSC FREQ)	00～FF	3C	Toggle
			PAL F2 (INV_OSC DUTY)	00～FF	1E	Toggle
			PAL F3 (PWM FREQ LBIT)	00～FF	D2	Toggle
			PAL F4 (PWM FREQ HBIT)	00～0F	00	Toggle
			PAL F5 (PWM DUTY LBIT)	00～FF	00	Toggle
			PAL F6 (PWM DUTY HBIT)	00～0F	00	Toggle
		3	G/A TEST PATTERN1	0～14	0	Toggle
			G/A TEST PATTERN2	0～12	0	Toggle
			G/A DATA	0000～	0000	No Toggle
			G/A DATA	WAIT/SEND	WAIT	No Toggle
			NTSC PWM FREQ	000～FFF	0D2	No Toggle
			PAL PWM FREQ	000～FFF	0D2	No Toggle
			NTSC PWM DUTY	0～100	0	No Toggle
			PAL PWM DUTY	0～100	0	No Toggle
		4	QS-D1(60)	0～2047	84	No Toggle
			QS-D2(60)	0～2047	108	No Toggle
			QS-D3(60)	0～2047	132	No Toggle
			QS-D4(60)	0～2047	148	No Toggle
			QS-D5(60)	0～2047	168	No Toggle
			QS-D6(60)	0～2047	188	No Toggle
			QS-D7(60)	0～2047	220	No Toggle

PAGE	FIRST LAYER ITEM	PAGE	SECOND LAYER ITEM	SETTING RANGE	INITIAL VALUE	DATA SETTING
2	G/A	5	QS-D1(50)	0～2047	72	No Toggle
			QS-D2(50)	0～2047	92	No Toggle
			QS-D3(50)	0～2047	112	No Toggle
			QS-D4(50)	0～2047	132	No Toggle
			QS-D5(50)	0～2047	152	No Toggle
			QS-D6(50)	0～2047	192	No Toggle
			QS-D7(50)	0～2047	224	No Toggle
			QS-READ	0～2047	Read Value	—
			QS-ON OFF	ON/OFF	OFF	No Toggle

PAGE	FIRST LAYER ITEM	PAGE	SECOND LAYER ITEM	SETTING RANGE	INITIAL VALUE	DATA SETTING
2	TUNER	1	AFT UP	0～5.0	3.2	No Toggle
			AFT DOWN	0～5.0	2.3	No Toggle
			LSYNC	0～9999	625	No Toggle
			HSYNC	0～9999	655	No Toggle
			AVSYNC	0～9999	5000	No Toggle

PAGE	FIRST LAYER ITEM	PAGE	SECOND LAYER ITEM	SETTING RANGE	INITIAL VALUE	DATA SETTING
2	FLI2310	1	FLI2310 DATA	00000000～	00000000	No Toggle
			FLI2310 DATA	WAIT/SEND	WAIT	No Toggle
			FLI2310 TEST	OFF/ON	OFF	Toggle
			CONTRAST	0～255	78	No Toggle
			BRIGHTNESS	0～255	150	No Toggle
			COLOR	0～255	110	No Toggle
			TINT	-30～+30	0	No Toggle
			SHARPNESS	0～255	64	No Toggle
			TXT SHARPNESS	0～255	0	No Toggle
			DTV SHARPNESS	0～255	32	No Toggle
			V SCROLL 60	000～3FF	Every screen size	No Toggle
			V SCROLL 50	000～3FF	Every screen size	No Toggle
		2	R CUTOFF	-64～0～+64	0	No Toggle
			G CUTOFF	-64～0～+64	0	No Toggle
			B CUTOFF	-64～0～+64	0	No Toggle
			R DRIVE	75～125	100	No Toggle
			G DRIVE	75～125	100	No Toggle
			B DRIVE	75～125	100	No Toggle
			MOTION THRESH	00～FF	2F	No Toggle
			VE GAIN	0～15	2	No Toggle
			NR	ON/OFF	ON	Toggle
			NR LEVEL	0～15	2	No Toggle
		3	VCR TH L(60)	512～521	516	No Toggle
			VCR TH M(60)	522～527	526	No Toggle
			VCR TH H(60)	528～543	529	No Toggle
			VCR TH L(50)	610～624	616	No Toggle
			VCR TH M(50)	625～630	626	No Toggle
			VCR TH H(50)	631～646	631	No Toggle

PAGE	FIRST LAYER ITEM	PAGE	SECOND LAYER ITEM	SETTING RANGE	INITIAL VALUE	DATA SETTING
2	DSP	1	BBE	ON/OFF	ON	No Toggle
			EQ	ON/OFF	ON	No Toggle
			AGC	ON/OFF	OFF	No Toggle
			AGC THRESH	0～17	9	No Toggle
			AGC NOISE	0～24	24	No Toggle
			AGC ATTACK	1～6	1	No Toggle
			AGC RELEASE	1～6	6	No Toggle
			AGC RATIO	0～5	3	No Toggle
			AGC BOOST	0～4	1	No Toggle
			AGC OUT	0～31	0	No Toggle
			BBE LEVEL	0～15	4	No Toggle
			BBE HFADJ	0～15	10	No Toggle
		2	BBE F0	0～31	10	No Toggle
			BBE Q	7～15	7	No Toggle
			BBE GAIN	0～12	9	No Toggle
			EQ MODE	0～3	0	No Toggle
			PEQ1 F0	0～61	19	No Toggle
			PEQ1 Q	0～15	8	No Toggle
			PEQ1 GAIN	0～31	5	No Toggle
			PEQ2 F0	0～61	40	No Toggle
			PEQ2 Q	0～15	6	No Toggle
			PEQ2 GAIN	0～31	19	No Toggle
			PEQ3 F0	0～61	49	No Toggle
			PEQ3 Q	0～15	8	No Toggle
			PEQ3 GAIN	0～31	5	No Toggle
		3	PEQ4 F0	0～61	14	No Toggle
			PEQ4 Q	0～15	4	No Toggle
			PEQ4 GAIN	0～31	0	No Toggle
			PEQ5 F0	0～61	14	No Toggle
			PEQ5 Q	0～15	4	No Toggle
			PEQ5 GAIN	0～31	0	No Toggle
			DELAY	0～8	4	No Toggle

PAGE	FIRST LAYER ITEM	PAGE	SECOND LAYER ITEM	SETTING RANGE	INITIAL VALUE	DATA SETTING
2	DOLBY	1	SP ANGLE	OFF/ON	OFF	No Toggle
			MASTER VOL OFF	0～-63	0	No Toggle
			MASTER VOL ON	0～-63	6	No Toggle
			L VOLUME	0～-63	0	No Toggle
			R VOLUME	0～-63	0	No Toggle
			C VOLUME	0～-63	0	No Toggle
			SL VOLUME	0～-63	0	No Toggle
			SR VOLUME	0～-63	0	No Toggle

PAGE	FIRST LAYER ITEM	PAGE	SECOND LAYER ITEM	SETTING RANGE	INITIAL VALUE	DATA SETTING
2	DELAY	1	DELAY_SEL1	0/1	1	Toggle
			DELAY_16BIT	0～34	10	No Toggle
			DELAY_24BIT	0～22	0	No Toggle
			DELAY_CHSET	0/1	1	Toggle
			DELAY_CISET	0/1	0	Toggle
			DELAY_CSET	0/1	1	Toggle

PAGE	FIRST LAYER ITEM	PAGE	SECOND LAYER ITEM	SETTING RANGE	INITIAL VALUE	DATA SETTING
2	TEXT	1	TEXT COMM		00000000000	No Toggle
			TEXT COMM	WAIT/SEND	WAIT	Toggle
			TEXT REGISTER		000000000	No Toggle
			TEXT REGISTER	WAIT/SEND	WAIT	Toggle
			NAME		000000000000000000	No Toggle
			TEXT HEADER NAME	WAIT/SEND	WAIT	Toggle
			V POSTION	00～FF	1F	No Toggle
			H POSTION	00～FF	B1	No Toggle
			EXT CONTROL	OFF/ON	OFF	Toggle
			UPDATE MODE	NORMAL/IPL/PRG	NORMAL	Toggle
			TEXT RESET	OFF/ON	OFF	Toggle

PAGE	FIRST LAYER ITEM	PAGE	SECOND LAYER ITEM	SETTING RANGE	INITIAL VALUE	DATA SETTING
2	OTHERS	1	L ERROR WAIT	0～30	15s	No Toggle
			L ERROR H TIME	0.0～4.0	3.0s	No Toggle
			TV GAIN	ON/OFF	OFF	Toggle
			LR EXCHANGE	50～500	100ms	Toggle
			MSP ASS WAIT	OFF/300m～1.5	1.2s	Toggle
			DVBT MODE	NORMAL/SERVICE/DOWNLOAD	NORMAL	Toggle

Software Upgrade Procedure for Digital Broadcasting Receiver Unit

1. Applicable Models

- LC22AD1E/K

2. Equipment Required

- PC card-sized flash memory card: 1

The following Compact Flash cards and PCMCIA Compact Flash card adapters are available.

Support the following Compact Flash card PCMCIA Compact Flash card adapters.

Manufacture	Product Number	Description
Sandisk	SDCFB-32-768	32MB Compact Flash card
Sandisk	SDCFB-64-768	32MB Compact Flash card
Kingston	CF/32	32MB Compact Flash card
Kingston	CF/64	64MB Compact Flash card
Integral		32MB Compact Flash card
Integral		64MB Compact Flash card
Sandisk	SDCF-38	PCMCIA Compact Flash card adapter
MicroTech	CFA	PCMCIA Compact Flash card adapter
Integral		PCMCIA Compact Flash card adapter

3. Preparation

1. Copy the software to download from your Windows computer to the flash card.
   Open Explorer.exe on your Windows computer and copy “FCL.IMG” and “IBOP.IMG” in the “Ver1.xx” folder (xx stands for the version of the software to download) to the top directory of the flash card.
   * Distribution method of the software will be informed to you separately.

2. Check the version of the software to be upgraded, if possible.
   The version of the software installed on the unit can be checked by following these menu options: DTV menu -> Setup -> Installations -> Software version.

3. Switch the image source to “DTV” and turn off the power.

4. Procedure

Upgrade the “Digital Broadcasting Receiver Unit Software”.

Case A: When the versions differ between the installed software and software to download

1. Make sure that the power of the unit is turned off, and insert the flash memory card into the CI slot.

2. Turn on the power.
   Download starts automatically.
   * Do not turn off the power until the download is complete about 2 minutes.
   There is no information appears on screen while downloading.
   When the download is complete, the digital broadcasting receiver unit resets itself and reboots automatically.
   After it is reset, the display blacks out for approximately 10 seconds, then the information banner appears.
   * If an error message appears, refer to “Troubleshooting”.

3. Check the software version.
   Follow these menu options: DTV menu -> Setup -> Installations -> Software version.
   Check that the version matches with the one you wanted to download.

4. Turn off the power and remove the flash memory card from the CI slot.

Case B: When the versions are the same between the installed software and software to download

1. Disconnect the antenna cable from the unit.

2. Make sure that the power of the unit is turned off, and insert the flash memory card into the CI slot.

3. Turn on the power.

4. Download the software manually as follows:
   - Use the buttons on the main unit or remote control to display the process mode screen.
   - Set “IBO PROG UPDATE” to “ON” and press the “OK” button.

   Download starts.
   * Do not turn off the power until the download is complete about 2 minutes.
   There is no information appears on screen while downloading.
   When the download is complete, the digital broadcasting receiver unit resets itself and reboots automatically.
   After it is reset, the display blacks out for approximately 10 seconds, then the information banner appears.
   * If an error message appears, refer to “Troubleshooting”.
   - Use the buttons on the main unit or remote control to exit the process mode screen.

5. Check the software version.
   Follow these menu options: DTV menu -> Setup -> Installations -> Software version.
   Check that the version matches with the one you wanted to download.

6. Turn off the power and remove the flash memory card from the CI slot.

Case C: When the version of the installed software cannot be confirmed

If the digital broadcasting receiver unit does not activate properly or enters the download mode immediately after it is activated, perform the following procedure.

1. Disconnect the antenna cable from the unit.

2. Make sure that the power of the unit is turned off, and insert the flash memory card into the CI slot.

3. Turn on the power.
   Download starts automatically.
   * Do not turn off the power until the download is complete about 2 minutes.
   There is no information appears on screen while downloading.
   When the download is complete, the digital broadcasting receiver unit resets itself and reboots automatically.
   After it is reset, the display blacks out for approximately 10 seconds, then the information banner appears.
   * If an error message appears, refer to “Troubleshooting”.

4. Check the software version.
   Follow these menu options: DTV menu -> Setup -> Installations -> Software version.
   Check that the version matches with the one you wanted to download.

5. Turn off the power and remove the flash memory card from the CI slot.

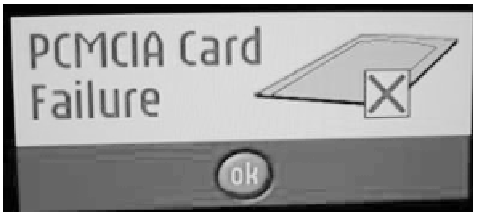
   This is the end of the download process.

Notes:
- Download takes about 2 minutes. Once the download starts, never turn off the power until the unit is reset automatically, or error message appears.
- After the download process is complete, perform the search operation from the menu, if necessary. Especially for Case C in “Procedure”, search (or Reinstall all services) should be performed as there is a high possibility that the service list has disappeared.

5. Troubleshooting

Error message may appear when the download is not completed properly.

Case A: Card identification failed



PCMCIA Card Failure

The unit failed to detect the card. Loose insertion or poor contact may be the cause. Follow the procedure below.

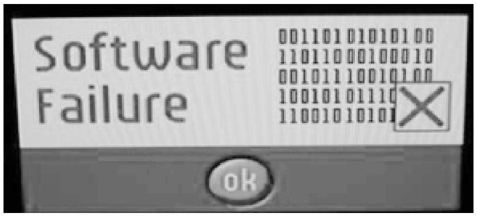
1. Turn off the power of the unit.

2. Remove the flash memory card from the CI slot.
- Check whether the Compact Flash card is inserted fully.
- Check that the used Compact Flash card or adapter is listed in the table under “Equipment Required”.

3. Re-insert the flash memory card into the CI slot.
- Ensure that the card is inserted fully into the slot.

4. Download the software again according to the above “Procedure”.

Case B: Software compatibility error



Software Failure

The software copied to the flash memory card is inappropriate. Copy failure or version incompatibility may be the cause.

1. Turn off the power of the unit.

2. Remove the flash memory card form the CI slot.

3. Insert the flash memory card into your Windows computer and copy the files again.
    - Check the versions of the files to copy.
    - Check that the files are copied to the top directory of the flash card.
    - Ensure that both files are copied.

4. Re-insert the flash memory card into the CI slot.
    - Ensure that the card is inserted fully into the slot.

5. Download the software again according to the above “Procedure”.

Major IC Informations

1. IC2510 (A385WJ) S/PDIF
   This is an audio signal encoder IC that converts signals to the S/PDIF format.
   The output signal of this IC is optically connected to an external digital adio device,allowing you to enjoy digital sound on an LCD TV.

2. IC3202 (A416WJ) MSP
   This is an audio signal processing IC called a Multi-Standard Sound Processor.
   This IC not only processes the audio signal of all standard analog TV broadcasts worldwide, it also incorporates the NICAM digital sound standard.

3. IC3301 (CXA2040A) VIDEO-SW
   This is an I2S BUS-compliant, 5-input, 3-output video switch.
   This switch is used to select the digital tuner output, analog tuner output, composite video input, and S-terminal input.

4. IC1603 (6258308X) 2Mb-SRAM
   This is a 256K x 8 bit CMOS static RAM.
   This IC is used to store TELTEXT signals (which are broadcast simultaneously) in the memory.
   These signals are output by a command from the TELTEXT micon as necessary.

5. IC1602 (A134WJ) 4M-FLASH
   This IC is a 4Mb dual operation flash memory.
   It incorporates a TELTEXT micon program, and it outputs data on a command from the TELTEXT micon.

6. IC1601 (SDA5550M) TELETEXT (LC-22AA1M ONLY)
   The SDA5550M is a single chip teletext decoder for decoding World System teletext data as well as Video Programming System (VPS), Program Delivery Control (PDC), and Wide Screen Signaling (WSS) data used for PAL plus transmissions (line23).

7. IC3501 (IXA904WJ) MICRO PROCESSOR
   This is a 16-bit single chip microcomputer that uses a high-performance silicon gate CMOS process. Although this microcomputer uses high-functionality commands, it has a high-command efficiency. It has a 1Mbyte address space and it has the ability to carry out instructions at high speed. It also incorporates an OSD and a data slicer. This microcomputer supports Closed Captions (an official teletext broadcast standard for hearing-impaired people) and ID1 (525p compliant).

8. IC801 (VPC3230D) VPC
   This IC is an I2S BUS-compliant video processor.
   This IC works as a 4H comb filter, Y/C separator, PAL/NTSC/SECAM color decoder, PIP processor, etc. Its results are output as an 8-bit Y-OUT/CrCb-OUT signal which is supplied to a scaler.

9. IC4601 (FLI2310) SCALER
   This IC is an I2S BUS-compliant scaler IC.
   The FLI2310 is a highly integrated digital video format converter for DTV and DVD applications using patented deinterlacing and post-processing algorithms from Faroudja Laboratories, coupled with highly flexible scaling, a wide variety of aspect ratio conversions, and other special video enhancing features to produce the highest quality image.

10. IC4603/IC4516 (A312WJ) 64M-SDRAM
    This IC is a 64Mb (2M x 32bit) synchronous DRAM memory.
    This IC is used to control the progressive converter,format converter (image conversion), noise reducer on the scaler (IC4601) and LCD control IC (IC4512), and Quick Shoot. Video signal is stored when correcting the Quick Shooting image quality.

11. IC4512 (IXA595) QS-LCD-CONTROL
    This is an LCD control IC for OS driving control that handles three-wire serial communication with the MICON (IC3501).
    It outputs a control signal for driving the liquid crystal panel.
    Additionally, it has a Quick shoot image quality correction function (including control of the temperature) and an OSD MIX function.

12. IC4701 (A706WJ) GRAY-LEVEL
    This IC is a gradation reference power supply for a TFT liquid crystal display. It incorporates a gradation output buffer amplifier (18 circuits), a COM buffer amplifier, and a REF amplifier (reference power supply).

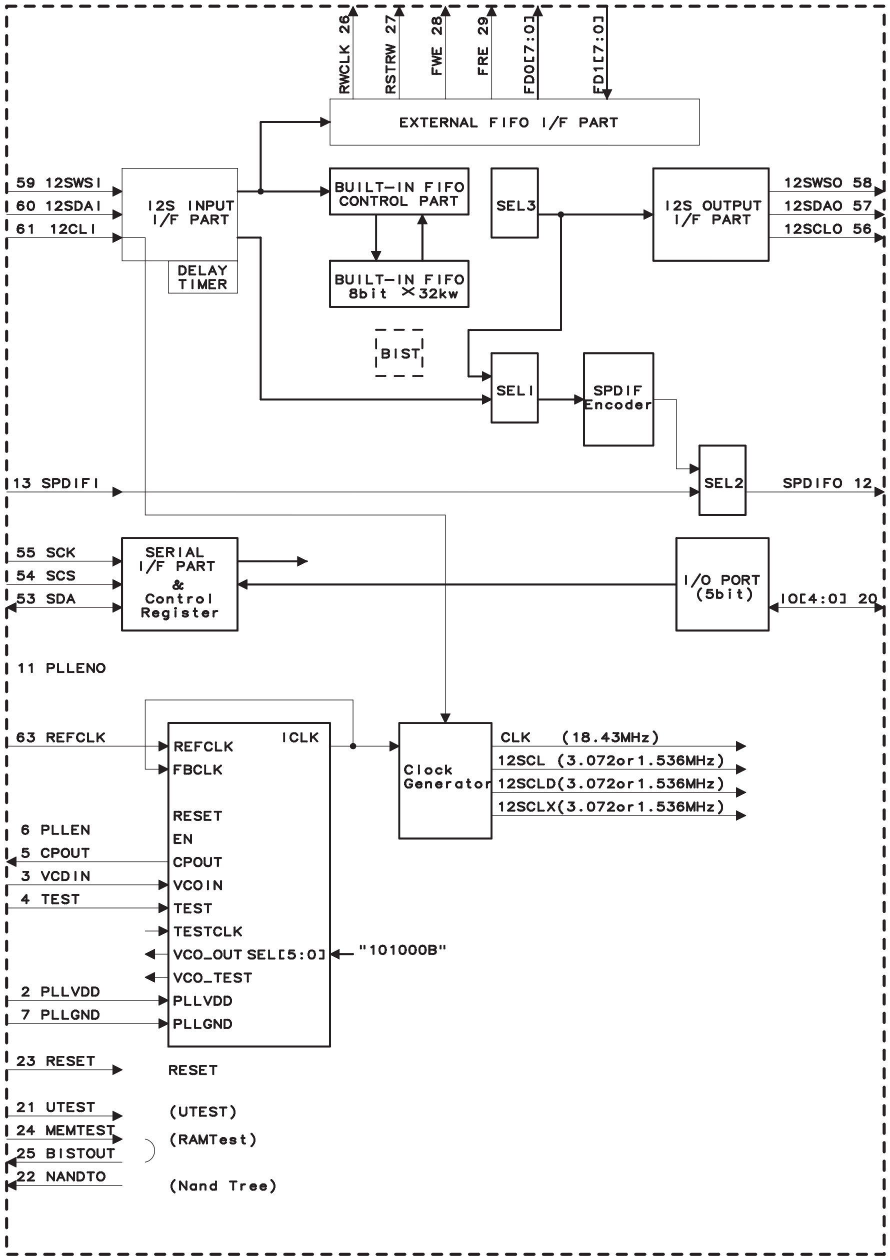
13. IC3405 (NJU26150) SOUND DSP
    This IC is a 24-bit digital audio processor.
    It downloads the program stored in the E2PROM IC3407 to the built-in PRAM and then executes it.
    Audio data input and output are performed through an I2S serial host interface. There are three data inputs and three data outputs.

14. IC3406 (NJU26106) VIRTUAL DOLBY
    This is the Virtual Dolby Surround IC, manufactured under license from Dolby Laboratories.
    Audio data input and output are performed through an I2S serial host interface.

15. IC3203 (BH3543F) HP-AMP
    This is the dual headphone output amplifier IC.
    It incorporates a POP noise prevention circuit and a thermal shut down circuit (150°C) that work if an eror occurs when turning the power on or off.

16. IC1623 (BA7046F) SYNC-SEP
    This IC incorporates a video synchronous separation circuit, a vertical synchronous separation circuit, a horizontal oscillation circuit, and a phase-comparison circuit. When a video signal is input, a composite synchronous signal (SYNC), a vertical synchronous signal (VD), and a horizontal synchronous signal (HD) are produced.
    This IC has both synchronous separation and AFC (Auto Frequency Control) functions.

RH-iXA385WJZZQ (ASSY:IC2510)
S/PDIF
BLOCK DIAGRAM


RWCLK 26
RSTRW 27
FWE 28
FRE 29
FD0[7:0]
FD1[7:0]
EXTERNAL FIFO I/F PART
59 12SWSI
60 12SDAI
61 12CLI
12S INPUT I/F PART
DELAY TIMER
BUILT-IN FIFO CONTROL PART
BUILT-IN FIFO 8bit ×32kw
BIST
SEL3
12S OUTPUT I/F PART
12SWSO 58
12SDAO 57
12SCLO 56
SEL1
SPDIF Encoder
SEL2
13 SPDIFI
SPDIFO 12
55 SCK
54 SCS
53 SDA
SERIAL I/F PART & Control Register
I/O PORT (5bit)
IO[4:0] 20
11 PLLENO
63 REFCLK
REFCLK
FBCLK
ICLK
RESET
EN
CPOUT
VCOIN
TEST
TESTCLK
VCO_OUT SEL[5:0]
VCO_TEST
PLLVDD
PLLGND
"101000B"
Clock Generator
CLK (18.43MHz)
12SCL (3.072or1.536MHz)
12SCLD(3.072or1.536MHz)
12SCLX(3.072or1.536MHz)
6 PLLEN
5 CPOUT
3 VCDIN
4 TEST
2 PLLVDD
7 PLLGND
23 RESET
RESET
21 UTEST
24 MEMTEST
25 BISTOUT
22 NANDTO
(UTEST)
(RAMTest)
(Nand Tree)

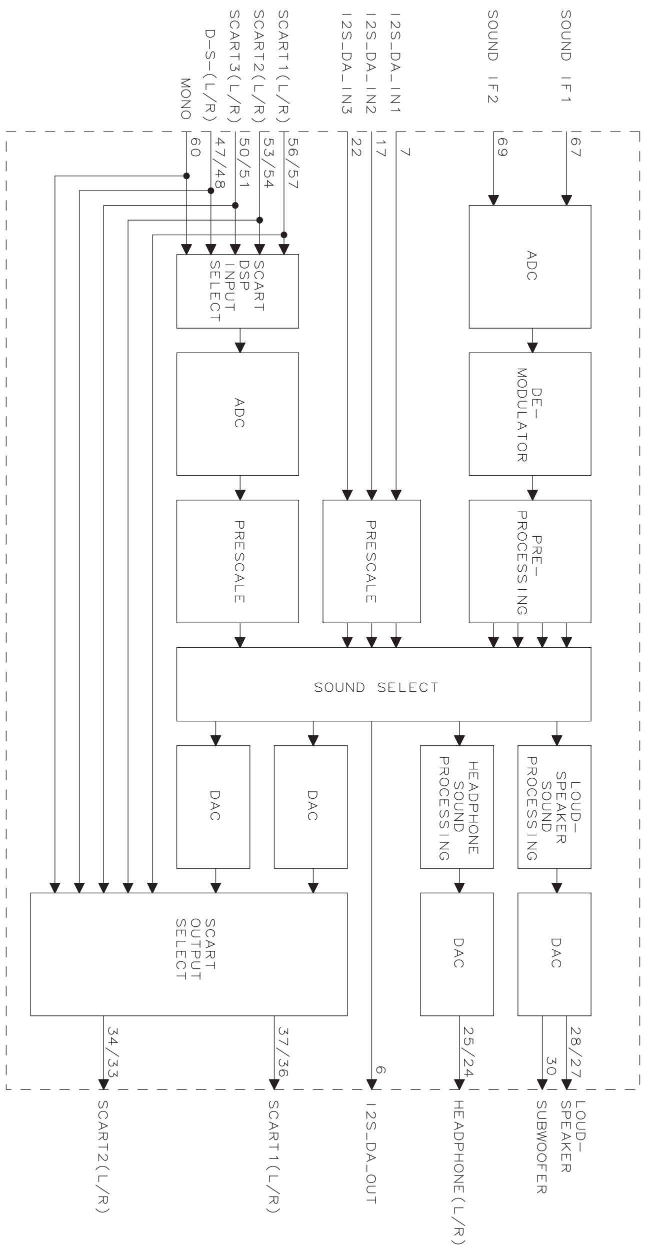
Pin functions of S/PDIF IC (IC2510) RH-iXA385WJZZ

Pin No.	Pin Name	I/O	Pin Function
1,19,32,33,44,64	VDD	---	Power supply
2	PLLVDC	---	Power supply for PLL
3	VCOIN	I	VCO IN (A loop filter is constituted externally.)
4	TEST	I	Input only for tests
5	CPOUT	O	Charge Pump Out (A loop filter is constituted externally.)
6	PLLEN	I	PLL enable
7	PLLGND	---	Ground for PLL
8,9,10,18,31,41,42,43,62	GND	---	Ground
11	PLLENO	O	PLL enable setting output
12	SPDIFO	O	S/PDIF output (3.072Mbps)
13	SPDIFI	I	S/PDIF input (3.072Mbps)
14	IO0	I/O	Extended I/O bit0
15	IO1	I/O	Extended I/O bit1
16	IO2	I/O	Extended I/O bit2
17	IO3	I/O	Extended I/O bit3
20	IO4	I/O	Extended I/O bit4
21	UTEST	I	Input only for tests
22	NANDTO	O	Output only for tests
23	RESET	I	Asynchronous reset input
24	MEMTEST	I	Input only for tests
25	BISTOUT	O	Output only for tests
26	RWCLK	O	Extended FIFO R/W clock
27	RSTRW	O	Extended FIFO master reset
28	FEW	O	Extended FIFO write enable
29	FRE	O	Extended FIFO read enable
30	FD07	O	Extended FIFO data output bit7
34	FD06	O	Extended FIFO data output bit6
35	FD05	O	Extended FIFO data output bit5
36	FD04	O	Extended FIFO data output bit4
37	FD03	O	Extended FIFO data output bit3
38	FD02	O	Extended FIFO data output bit2
39	FD01	O	Extended FIFO data output bit1
40	FD00	O	Extended FIFO data output bit0
45	FD17	I	Extended FIFO data output bit7
46	FD16	I	Extended FIFO data output bit6
47	FD15	I	Extended FIFO data output bit5
48	FD14	I	Extended FIFO data output bit4
49	FD13	I	Extended FIFO data output bit3
50	FD12	I	Extended FIFO data output bit2
51	FD11	I	Extended FIFO data output bit1
52	FD10	I	Extended FIFO data output bit0
53	SDA	I/O	Serial communication data
54	SCS	I	Serial communication chip selecte
55	SCK	I	Serial communication clock
56	I2SCLO	O	I2S CL Output
57	I2SDAO	O	I2S DA Output
58	I2SWSO	O	I2S WS Output
59	I2SWSI	I	I2S WS Output
60	I2SDAI	I	I2S DA Input
61	I2SCLI	I	I2S CL Input
63	REFCLK	I	REF CLK of PLL (the same input as I2SCLI)

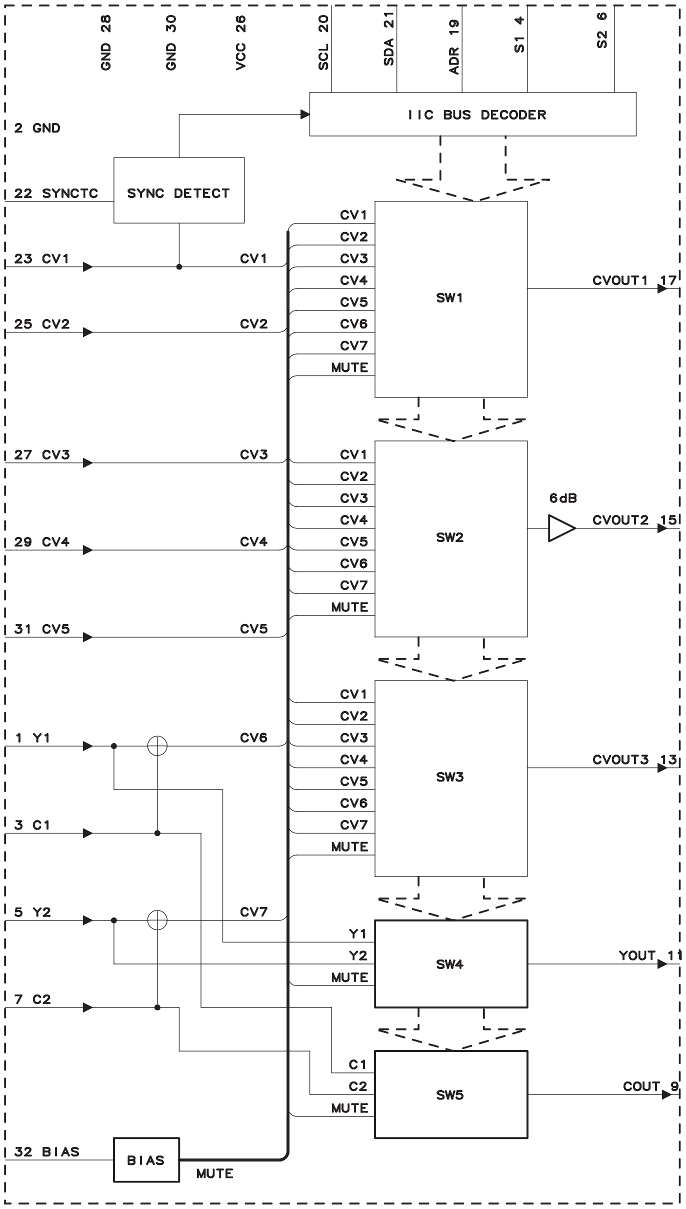
Pin functions of MSP IC (IC3202) RH-iXA416WJZZ

Pin No.	Pin Name	I/O	Pin Function
1	NC	—	Not connected
2	I2C_CL	I/O	I2C clock
3	I2C_DA	I/O	I2C data
4	I2S_CL	I/O	I2S clock
5	I2S_WS	I/O	I2S word strobe
6	I2S_DA_OUT	O	I2S data output
7	I2S_DA_IN1	I	I2S1 data input
8	ADR_DA	O	ADR data output
9	ADR_WS	O	ADR word strobe
10	ADR_CL	O	ADR clock
11,12,13	DVSUP	—	Digital power supply 5V
14,15,16	DVSS	—	Digital ground
17	I2S_DA_IN2	I	I2S2-data input
18	NC	—	Not connected
19	I2S_CL3	I/O	I2S3 clock
20	I2S_WS3	I/O	I2S3 word strobe
21	RESETQ	I	Power-on-reset
22	I2S_DA_IN3	I	I2S3 data input
23	NC	—	Not connected
24	DACA_R	O	Headphone out, right
25	DACA_L	O	Headphone out, left
26	VREF2	—	Reference ground 2
27	DACM_R	O	Loudspeaker out, right
28	DACM_L	O	Loudspeaker out, left
29	NC	—	Not connected
30	DACM_SUB	O	Subwoofer output
31,32	NC	—	Not connected
33	SC2_OUT_R	O	SCART 2 output, right
34	SC2_OUT_L	O	SCART 2 output, left
35	VREF1	—	Reference ground 1
36	SC1_OUT_R	O	SCART 1 output, right
37	SC1_OUT_L	O	SCART 1 output, left
38	CAPL_A	—	Volume capacitor AUX
39	AHVSUP	—	Analog power supply 8V
40	CAPL_M	—	Volume capacitor MAIN
41,42	NC	—	Not connected
43,44	AHVSS	—	Analog ground
45	AGNDC	—	Analog reference voltage
46	NC	—	Not connected
47	SC4_IN_L	I	SCART 4 input, left
48	SC4_IN_R	I	SCART 4 input, right
49	ASG4	—	Analog Shield Ground 4
50	SC3_IN_L	I	SCART 3 input, left
51	SC3_IN_R	I	SCART 3 input, right
52	ASG2	—	Analog Shield Ground 2
53	SC2_IN_L	I	SCART 2 input, left
54	SC2_IN_R	I	SCART 2 input, right
55	ASG1	—	Analog Shield Ground 1
56	SC1_IN_L	I	SCART 1 input, left
57	SC1_IN_R	I	SCART 1 input, right
58	VREFTOP	—	Reference voltage IF A/D converter
59	NC	—	Not connected
60	MONO_IN	I	Mono input
61,62	AVSS	—	Analog ground
63,64	NC	—	Not connected
65,66	AVSUP	—	Analog power supply 5V
67	ANA_IN1+	I	IF input 1
68	ANA_INI-	I	IF common (can be left vacant, only if IF input 1 is also not in use)
69	ANA_IN2+	I	IF input 2 (can be left vacant, only if IF input 1 is also not in use)
70	TESTEN	I	Test pin
71	XTAL_IN	I	Crystal oscillator
72	XTAL_OUT	O	Crystal oscillator
73	TP	—	Test pin
74	AUD_CL_OUT	O	Audio clock output(18.432MHz)
75,76	NC	—	Not connected
77	D_CTR_I/O_1	I/O	D_CTR_I/O_1
78	D_CTR_I/O_0	I/O	D_CTR_I/O_0
79	ADR_SEL	I	I2C Bus address select
80	STANDBYQ	I	Stand-by(low-active)

RH-iXA416WJZZQ (ASSY:IC3202)
MSP (Muti Standard Sound Processor)
BLOCK DIAGRAM


SOUND IF1
SOUND IF2
I2S_DA_IN1
I2S_DA_IN2
I2S_DA_IN3
SCART1(L/R)
SCART2(L/R)
SCART3(L/R)
D-S-(L/R)
MONO
67
69
7
17
22
56/57
53/54
50/51
47/48
60
ADC
DE-MODULATOR
PRE-PROCESSING
PRESCALE
SCART DSP INPUT SELECT
ADC
PRESCALE
SOUND SELECT
LOUD-SPEAKER SOUND PROCESSING
HEADPHONE SOUND PROCESSING
DAC
DAC
DAC
DAC
SCART OUTPUT SELECT
28/27
30
25/24
6
37/36
34/33
LOUD-SPEAKER
SUBWOOFER
HEADPHONE(L/R)
I2S_DA_OUT
SCART1(L/R)
SCART2(L/R)

VHiCXA2040-1Q (ASSY:IC3301)
VIDEO SW
BLOCK DIAGRAM

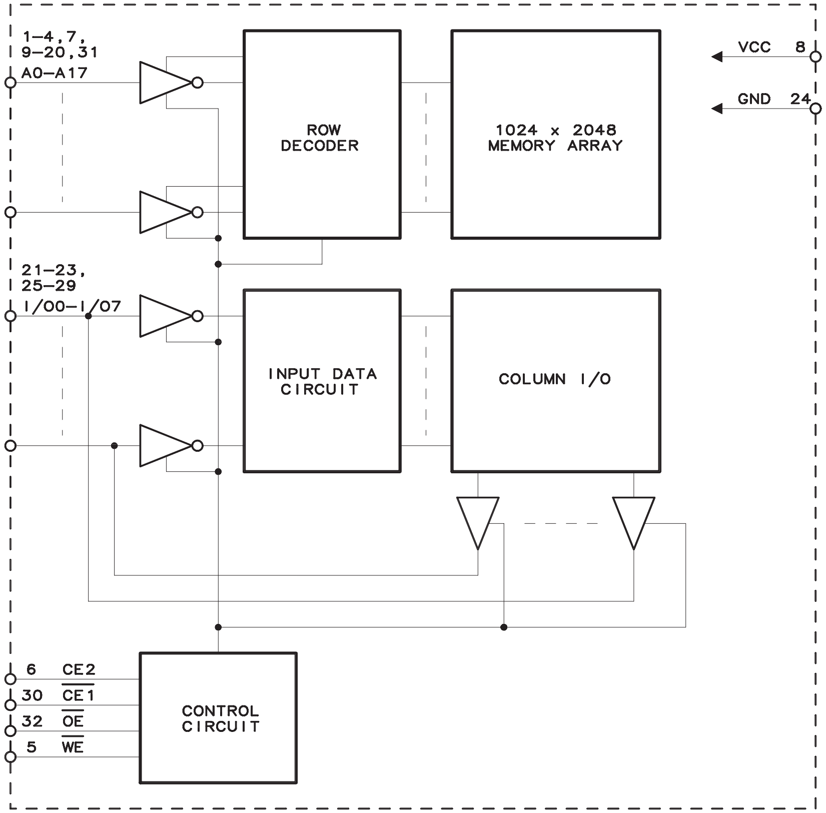

GND 28
GND 30
VCC 26
SCL 20
SDA 21
ADR 19
S1 4
S2 6
IIC BUS DECODER
2 GND
22 SYNCTC
SYNC DETECT
23 CV1
25 CV2
27 CV3
29 CV4
31 CV5
1 Y1
3 C1
5 Y2
7 C2
32 BIAS
BIAS
MUTE
CV1
CV2
CV3
CV4
CV5
CV6
CV7
CV1
CV2
CV3
CV4
CV5
CV6
CV7
MUTE
SW1
CVOUT1 17
CV1
CV2
CV3
CV4
CV5
CV6
CV7
MUTE
SW2
6dB
CVOUT2 15
CV1
CV2
CV3
CV4
CV5
CV6
CV7
MUTE
SW3
CVOUT3 13
Y1
Y2
MUTE
SW4
YOUT 11
C1
C2
MUTE
SW5
COUT 9

Pin functions of VIDEO SW IC (IC3301) VHiCXA2040A-1Q

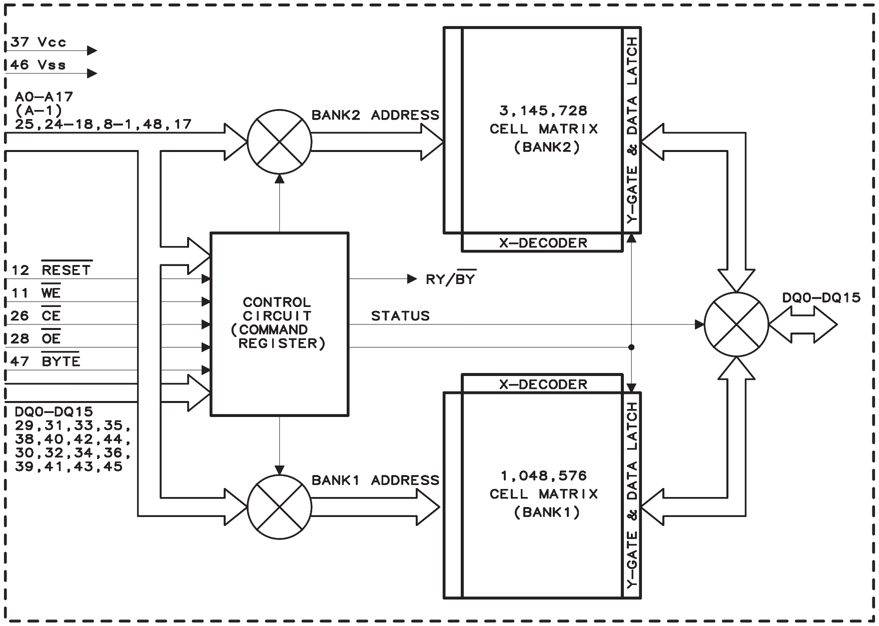
Pin No.	Pin Name	I/O	Pin Function
1	Y1	I	Input terminal Y1 of the Y/C separation signal
2	GND	—	GND
3	C1	I	Input terminal C1 of the Y/C separation signal
4	S1	I	Input to the microcomputer as I2C BUS status register data
5	Y2	I	Input terminal Y2 of the Y/C separation signal
6	S2	I	Input to the microcomputer as I2C BUS status register data
7	C2	I	Input terminal C2 of the Y/C separation signal
8	NC	—	-
9	COUT	O	Output terminal C of the Y/C separation signal
10	NC	—	-
11	YOUT	O	Output terminal Y of the Y/C separation signal
12	NC	—	-
13	CVOUT3	O	Output terminal CVOUT3 of the composite video signal
14	NC	—	-
15	CVOUT2	O	Output terminal CVOUT2 of the composite video signal
16	NC	—	-
17	CVOUT1	O	Output terminal CVOUT1 of the composite video signal
18	NC	—	-
19	ADR	I	I2C BUS slave address selection terminal
20	SCL	I	I2C BUS signal input termina
21	SDA	I	I2C BUS signal input termina
22	SYNCTC	—	Terminal for SYNC-SEP SYNC-CHIP time constant
23	CV1	I	Input terminal CV1 of the composite video signal
24	NC	—	-
25	CV2	I	Input terminal CV2 of the composite video signal
26	VCC	I	Power terminal (9V)
27	CV3	I	Input terminal CV3 of the composite video signal
28	GND	—	GND
29	CV4	I	Input terminal CV4 of the composite video signal
30	GND	—	GND
31	CV5	I	Input terminal CV5 of the composite video signal
32	BIAS	I	4.5V BIAS terminal

Ground pin numbered 8, 10, 12, 14, 16, 18, and 24 to GND.

VHi162S8308X-1Q (ASSY:IC1603)
2M-SRAM
BLOCK DIAGRAM


1–4,7,
9–20,31
A0–A17
21–23,
25–29
I/O0–I/O7
ROW DECODER
1024 x 2048 MEMORY ARRAY
INPUT DATA CIRCUIT
COLUMN I/O
VCC 8
GND 24
6 CE2
30 $\overline{\text{CE1}}$
32 $\overline{\text{OE}}$
5 $\overline{\text{WE}}$
CONTROL CIRCUIT

RH-iXA134WJN5 (ASSY:IC1602)
4M-FRASH
BLOCK DIAGRAM


37 Vcc
46 Vss
A0–A17
(A–1)
25,24–18,8–1,48,17
BANK2 ADDRESS
3,145,728 CELL MATRIX (BANK2)
X–DECODER
Y–GATE & DATA LATCH
12 $\overline{\text{RESET}}$
11 $\overline{\text{WE}}$
26 $\overline{\text{CE}}$
28 $\overline{\text{OE}}$
47 $\overline{\text{BYTE}}$
CONTROL CIRCUIT (COMMAND REGISTER)
RY/$\overline{\text{BY}}$
STATUS
DQ0–DQ15
DQ0–DQ15
29,31,33,35,
38,40,42,44,
30,32,34,36,
39,41,43,45
BANK1 ADDRESS
1,048,576 CELL MATRIX (BANK1)
X–DECODER
Y–GATE & DATA LATCH

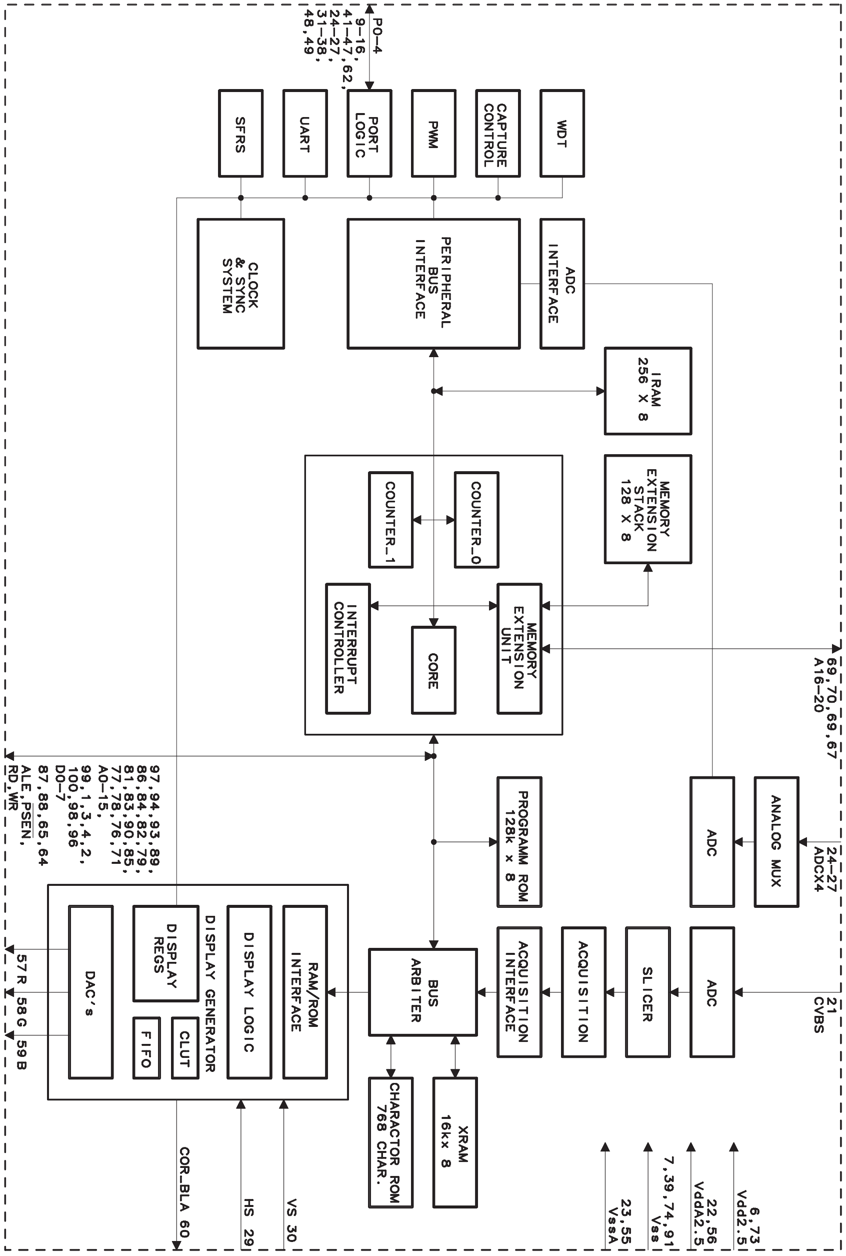
Pin functions of 2M-SRAM IC (IC1603) VHi162S8308X-1Q

Pin No.	Pin Name	I/O	Pin Function
1-4,7,9-20,31	A0-A17	I	Address Input
5	$\overline{\text{WE}}$		Write Enable
6	CE2		Chip Enable 2
8	VCC	-	Power Supply
21-23,25-29	I/O0-I/O7	I/O	Data Input/Output
24	GND	-	Ground
30	$\overline{\text{CE1}}$		Chip Enable 1
32	$\overline{\text{OE}}$		Output Enable

Pin functions of FRASH MEMORY IC (IC1602) RH-iXA134WJN5

Pin No.	Pin Name	I/O	Pin Function
1-8,17-25,45	A-1,A0-A17	I	Address Inputs
29-36,38-45	DQ0-DQ15	I/O	Data Inputs/Outputs
26	$\overline{\text{CE}}$	I	Chip Enable
28	$\overline{\text{OE}}$	O	Output Enable
11	$\overline{\text{WE}}$	I	Write Enable
12	$\overline{\text{RESET}}$	I	Hardware reset
15	RY/$\overline{\text{BY}}$	O	Ready/busy Output
47	$\overline{\text{BYTE}}$	I	Byte Enable:8bit,16bit mode selecter
27,46	VSS	---	Ground
37	VCC	---	Device Power Supply(2.7V-3.6V or 3.0V-3.6V)
9,10,13,14,16	N.C.	---	Non connection

VHiSDA5550M-1 (ASSY:IC1601)
TELETEXT CPU
BLOCK DIAGRAM



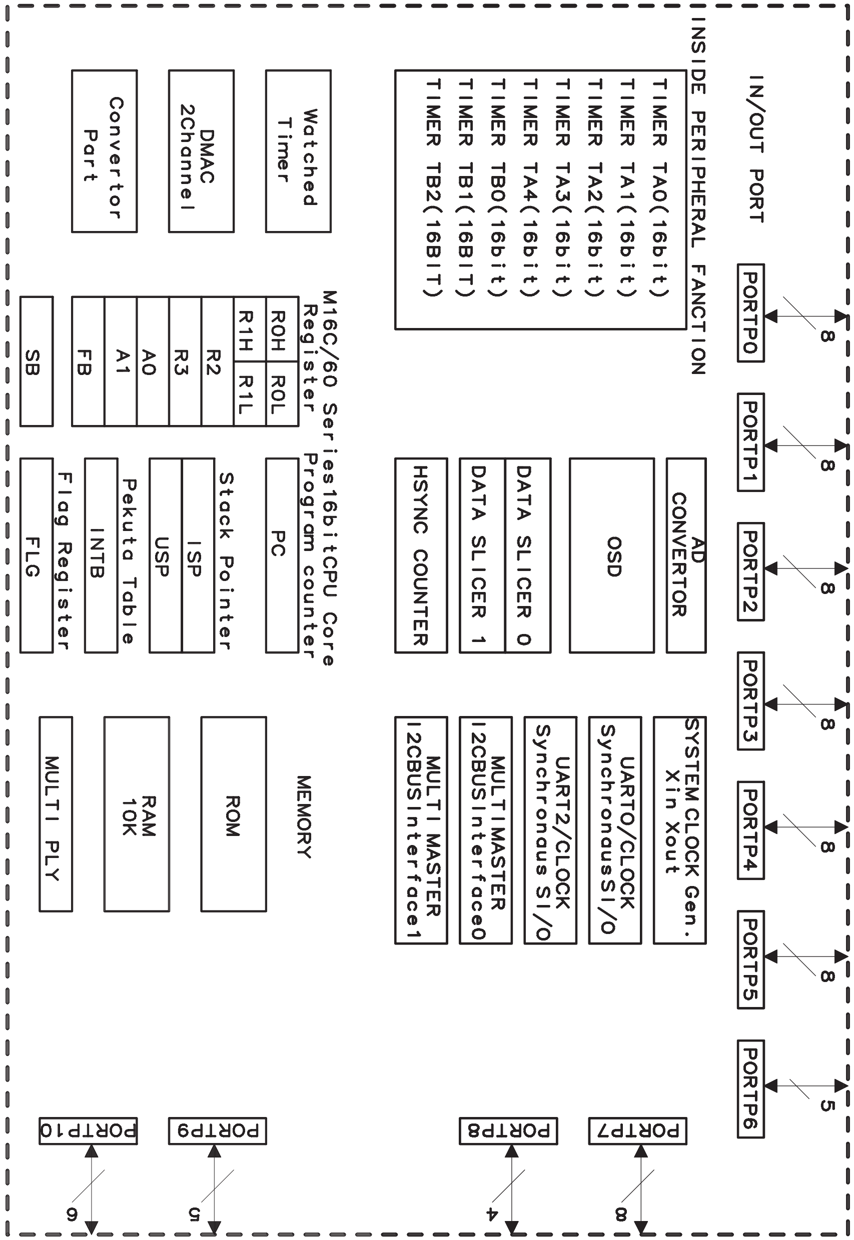
P0–4
9–16,
41–47,62,
24–27,
31–38,
48,49
WDT
CAPTURE CONTROL
PWM
PORT LOGIC
UART
SFRS
ADC INTERFACE
PERIPHERAL BUS INTERFACE
CLOCK & SYNC SYSTEM
IRAM 256 X 8
MEMORY EXTENSION STACK 128 X 8
MEMORY EXTENSION UNIT
COUNTER_0
COUNTER_1
CORE
INTERRUPT CONTROLLER
69,70,69,67
A16–20
24–27
ADCX4
ANALOG MUX
ADC
PROGRAMM ROM 128k x 8
21
CVBS
ADC
SLICER
ACQUISITION
ACQUISITION INTERFACE
BUS ARBITER
XRAM 16kx 8
CHARACTOR ROM 768 CHAR.
RAM/ROM INTERFACE
DISPLAY LOGIC
DISPLAY GENERATOR
DISPLAY REGS
CLUT
FIFO
DAC's
6,73
Vdd2.5
22,56
VddA2.5
7,39,74,91
Vss
23,55
VssA
VS 30
HS 29
COR_BLA 60
57 R
58 G
59 B
97,94,93,89,
86,84,82,79,
81,83,90,85,
77,78,76,71
A0–15,
99,1,3,4,2,
100,98,96
D0–7
87,88,65,64
ALE,PSEN,
RD,WR

Pin functions of TELETEXT IC (IC1601) VHiSDA5550M-1

Pin No.	Pin Name	I/O	Pin Function
99,1,3,4,2,100,98,96	D0-D7	I/O	Data bus for external memory or data RAM.
97,94,93,89,86,84,82, 79,81,83,90,85,77,78, 76,71,69	A0-A16	O	Address bus for external program memory or data RAM.
70,68,67	A17-A19/ P4.0,P4.1,P4.4	I/O	After power-on P4.0,P4.1,P4.4 work as additional address lines A17…A19. In port mode, these port lines act as bi-directional I/O port with internal pull-up resistors. Port pins that have '1' written to them are pulled high by the internal pull-up resistors and in that state can be used as inputs.
9,10,11,12,13,14,15,16	P0.0-P0.7	I/O	Port 0 is a 8-bit open drain bi-directional I/O-port. Port 0 pins that have 1 written to them float: in this state they can be used as high impedance inputs.
41,42,43,44,45,46,47,62	P1.0-P1.7 (PWM)	I/O	Port is a 8-bit bi-directional multifunction I/O port with internal pull-up resistors. Port 1 pins that have 1 written to them are pulled high by the internal pull-up resistors and in that state can be used as inputs. The secondary functions of port 1 pins are: Port bits P1.0-P1.5 contain the 6 output channels of the 8-bit pulse width modulation unit. Port bits P1.6-P1.7 contain the two output channels of the 14-bit pulse width modulation unit.
24,25,26,27	P2.0-P2.3 (ADC)	I	Port 2 is a 4-bit input port without pull-up resistors. Port 2 also works as analog input for the 4-channel-ADC.
31,32,33,34,35,36,37,38	P3.0-P3.7	I/O	Port 3 is an 8-bit bi-directional I/O port with internal pull-up resistors, Port 3 pins that have 1 written to them are pulled high by the internal pull-up resistors and in that state can be used as inputs, To use the secondary functions of Port 3, the corresponding output latch must be programmed to a one (1) for that function to operate. The secondary functions are as follows: ・Alternate function P3.0: ODD/EVEN indicate output P3.1: external extra interrupt 0(INTX0)/UART(TXD) P3.2: interrupt 0 input/timer 0 gate control input)INT0) P3.3: interrupt 1 input/timer 1 gate control input)INT1) P3.4: counter 0 input(T0) P3.5: counter 1 input(T1) or In master mode HS or VCS output. P3.7: external extra interrupt 0(INTX1)/UART(RXD)
48,49	P4.2-P4.3(P4.7)	I/O	Port 4 is a bi-directional I/O port with internal pull-up resistors. Port 4 pins that have 1 written to them are pulled high by the internal pull-up resistors and in that state can be used as inputs. Secondary functions P4.2: RD, Read line. This signal is same as the to output of the pin RD available in some packages. P4.3: WR write line. This signal is same as the output of the pin WE, which is only available in some package.
5	XROM	I	This pin must be pulled low to access external ROM.
17	ENE	I	Enable Emulation Only if this pin set to zero externally, STOP and OCF are operational. ENE has an internal pull-up resistor which switches automatically to non-emulation mode if ENE is not connected.
18	STOP	I	STOP Emulation control line; Driving a low level during the input phase freezes the real time relevant internal peripherals such as timers and interrupt controller.
19	OCF	O	Opcode Fetch Emulation control line; A high level driven by the controller during output phase indicates the beginning of a new instruction.
20	EXTIF		
21	CVBS	I	CVBS input for the acquisition circuit.
29	HS/SC	I	In slave mode Horizontal sync input or sandcastle input for display synchronization .In master mode HS or VCS output.
30	VS/P4.7	I/O	Vertical sync input/output for display synchronization. Can also be used as digital input P4.7. Furthermore this pin can be selected as an ODD/EVEN indicator alternatively to P3.0.
50	RST	I	A low level on this pin resets the device. An internal pull-up resistor permits power-on reset using only one external capacitor connected to Vss.
52	XTAL2	O	Output of the inverting oscillator amplifier.
53	XTAL1	I	Input of the inverting oscillator amplifier.
57	R	O	Red
58	G	O	Green
59	B	O	Blue
60	BLANK/COR	O	Contrast reduction and blanking.

64	WR	O	Control output; indicates a write access to the internal XRAM; can be used as a write strobe for writing data into an external data RAM by a MOVX instruction. This signal is also available as P4.3.
65	RD	O	Control output; indicates a read access to the internal XRAM; can be used for latching data from the data bus into an external data RAM by a MOVX instruction. This signal is also available as P4.2.
72	FL_PGM	I	All the pins prefix by Flax are test pins which must be left open.
80	FL_RST	I	All the pins prefix by Flax are test pins which must be left open.
87	ALE	O	Address Latch Enable.
88	PSEN	O	Program Store Enable is a control output signal which is usually connected to OE input line of the external program memory to enable the data output.
95	FL_CE	I	All the pins prefix by Flax are test pins which must be left open.
6,73	VDD2.5	---	Supply voltage (2.5V).
22,56	VDDA2.5	---	Supply voltage for analog components (2.5V).
8,40,75,92	VDD3.3	---	Input/output (3.3V).
7,39,74,91,	VSS	---	Ground (0V).
23,55	VSSA	---	Ground for analog components.
28,51,54,61,63,66	---	---	

RH-iXA799WJN1Q (ASSY:IC3501)
MICRO PROCESSOR
BLOCK DIAGRAM


IN/OUT PORT
PORTP0
PORTP1
PORTP2
PORTP3
PORTP4
PORTP5
PORTP6
8
8
8
8
8
8
5
INSIDE PERIPHERAL FANCTION
TIMER TA0(16bit)
TIMER TA1(16bit)
TIMER TA2(16bit)
TIMER TA3(16bit)
TIMER TA4(16bit)
TIMER TB0(16bit)
TIMER TB1(16BIT)
TIMER TB2(16BIT)
AD CONVERTOR
OSD
DATA SLICER 0
DATA SLICER 1
HSYNC COUNTER
SYSTEM CLOCK Gen. Xin Xout
UART0/CLOCK SynchronausSI/O
UART2/CLOCK Synchronaus SI/O
MULTIMASTER I2CBUSInterface0
MULTI MASTER I2CBUSInterface1
PORTP7
8
PORTP8
4
Watched Timer
DMAC 2Channel
Convertor Part
M16C/60 Series16bitCPU Core
Register
R0H
R0L
R1H
R1L
R2
R3
A0
A1
FB
SB
Program counter
PC
Stack Pointer
ISP
USP
Pekuta Table
INTB
Flag Register
FLG
MEMORY
ROM
RAM 10K
MULTI PLY
PORTP9
5
PORTP10
6

Pin functions of MICRO PROCESSOR IC (IC3501) RH-iXA799WJN1Q

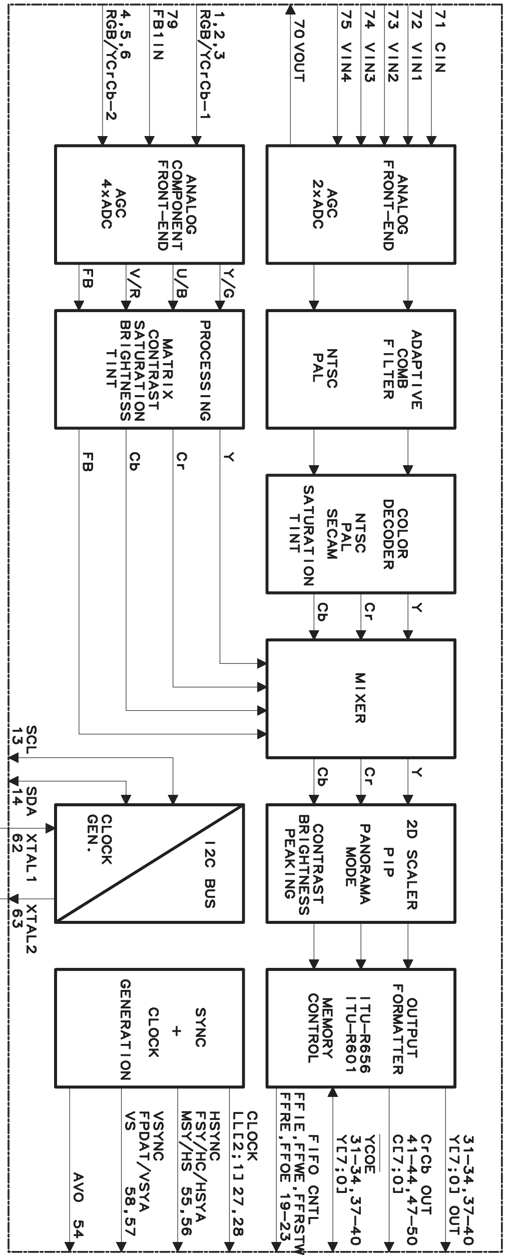
Pin No.	Pin Name	I/O	Pin Function
1	VHOLD1	VHOLD1	Pull-down
2	HLF1	HLF1	Pull-down
3	SCL2	EEPSCL	I2C bus clock output for EEPROM
4	SDA2	EEPSDA	I2C bus data input/output for EEPROM
5	1BIT_5VCONT	Output port	1-bit amp. Regulator control
			H: ON
			L: OFF
6	CSYNC	TB1IN	Compound synchronizing signal
7	R/C	TB0IN	Remote control signal input
8	BYTE	BYTE	GND
9	CNVSS	CNVss	GND/3.3V when FLASH is written
10	TEXT_RST	Output port	TEXT reset output
			H: Reset
			L: Normal
11	SH_ON	Output port	TEXT communication control
			H: Communication disabled
			L: Communication enabled
12	RESET	RESET	Reset input
			H: Normal
			L: Reset
13	XOUT	Xout	System clock output
14	VSS	Vss	GND
15	XIN	Xin	System clock input
16	VDD	Vcci	Power supply (3.3V)
17	OSCIN	OSC1	OSD oscillation input
18	OSCOUT	OSC2	OSD oscillation output
19	PSWIN	INT1	Main power supply input
			H: Main power OFF
			L: Main power ON
20	MP_RCS	Input port	G/A chip select for reading
21	BLK	OUT1	OSD blank output
22	N.C.	OUT2	
23	DAC1CS	Output port	DAC1 chip select for gradation
24	AD_POW	Input port	Instantaneous power failure detection
			H: Normal
			L: Power failure
25	SCL	Output port	I2C bus clock output
26	SDA	I/O port	I2C bus data input/output
27	MP_RDA	Input port	G/A data input for reading
28	FAN_CONT	Output port	Fan control output
			H: ON
			L: OFF
29	DTV_SCL	Output port	I2C clock output for digital tuner unit
30	DTV_SDA	I/O port	I2C data input/output for digital tuner unit
31	PRT_FAN_IN	Input port	Fan error detection input
			H: Error
			L: Normal
32	OSD_R	Output port	OSD R signal output
33	OSD_G	Output port	OSD G signal output
34	OSD_B	Output port	OSD B signal output
35	TXD	Output port	TEXT data output/FLASH writing
36	RXD	Input port	TEXT data input/FLASH writing
37	SCLK	CLK	FLASH writing
38	BUSY	RTS	FLASH writing
39	POW_RL	Output port	1-bit amp. Power relay control
			H: ON
			L: OFF
40	1BIT_RESET	Output port	1-bit amp. Attached AD reset
			H: Normal
			L: Reset
41	MREADY	Input port	External bus mode transition input/FLASH writing
			H: Normal
			L: External bus mode transition request
42	L_ERR	Input port	Fluorescent lamp error detection input
			H: Error
			L: Normal
43	HP_DET	Input port	Headphone connection detection input
			H: Connected
			L: Not connected
44	1BIT_PROTECT	Input port	1-bit amp. Protect detection
			H: Normal
			L: Protect

45	1BIT_RST/PDN	Output port	1-bit amp. Reset H: Normal L: Reset
46	CE	Input port	FLASH writing
47	1BIT_MUTE	Output port	1-bit amp. Mute H: Mute L: Normal
48	SP_RLY	Output port	1-bit amp. Speaker relay control H: Speaker ON L: Speaker OFF
49	DV_RST	Output port	Dolby virtual Reset
50	VSH_OUT	Output port	Regulator control output H: ON L: OFF
51	REQ_OUT	Output port	External bus mode transition completion output H: Normal L: External bus mode
52	TBUS_CLK	Output port	Sound delay IC TBUS clock
53	SMUTE	Output port	Sound mute output H: Mute ON L: Mute OFF
54	TEXT_MODE1	Output port	For TEXT microcomputer update
55	TEXT_MODE0	Output port	For TEXT microcomputer update
56	SSTBY	Output port	Speaker stand-by mute output H: Mute OFF L: Mute ON
57	VSH_IN	Input port	Regulator power detection H: Abnormal L: Normal
58	LMUTE	Output port	External output sound mute output H: Mute ON L: Mute OFF
59	STB	Output port	Microcomputer power OFF output H: Normal L: Main power OFF
60	SRESET	Output port	Multiplex reset output H: Normal L: Reset
61	TBUS_CS	Output port	Sound delay IC TBUS chip select
62	OSD_HSYNC	Hsync	OSD horizontal synchronizing signal input
63	POWIN	Input port	DC/DC start detection input H: ON L: OFF
64	OSD_VSYNC	Vsync	OSD vertical synchronizing signal input
65	FB_SW2	Output port	First blanking switch 2 H:TEXT/DIGITAL L:SCART1
66	FB_SW1	Output port	First blanking switch 1 H:DIGITAL L:SCART1/TEXT
67	RGB_SW1	Output port	RGB switch 1 H:DIGITAL L:SCART
68	RGB_SW2	Output port	RGB switch 2 H:TEXT L:SCART/DIGITAL
69	IRQ	Input port	IBO status read request H→L:Slave⇒Master communication start L→H: Status read start (Slave⇒Master in communication) H : Normal
70	SP_SW	Output port	Internal/external speaker switching H: External L: Internal
71	PMUTE	Output port	Video mute output H: Mute ON L: Mute OFF
72	POW_OUT	Output port	TV power control H: ON L: OFF
73	TBUS_DA	I/O port	Sound delay IC TBUS data
74	REC_LED	Output port	Remote control reception LED output Flash: Receiving L : Normal
75	OPC_LED	Output port	Auto save LED output H: Auto save ON L: Auto save OFF
76	PRT_LED	Output port	Slave IC error detection output (FLASH) Flash: Receiving L : Normal
77	MP_CS	Output port	G/A chip select output
78	MP_DA	Output port	G/A data output
79	MP_CLK	Output port	G/A clock output
80	DDC_RST	Output port	Digital decoder reset H: Normal L: Reset
81	KEY3	Input port	Process key entry KEY3 KEY4 Initialization L L
82	KEY4	Input port	Process H L Normal H H
83	PANEL_POW	Output port	Panel power control H: ON L: OFF
84	D_RST2	Output port	Digital tuner reset H: Normal L: Reset
85	SYSTEM1	Output port	Tuner system switching SYSTEM1 SYSTEM2 B/G, I, D/K L L
86	SYSTEM2	Output port	L H L
87	HP_MUTE	Output port	Headphone mute output H: Mute L: Normal
88	SSW	Input port	S-terminal connection detection H: Not connected L: Connected
89	AFT	AD	AFT voltage input
90	SD_PLLEND	Input port	Sound delay IC status detection H: Normal L: Abnormal
91	KEY1	AD	Main unit key entry 1 Input voltage (V) Description 0-0.31 CH UP 0.32-0.94 CH DOWN 0.95-1.57 MENU
92	KEY2	AD	Main unit key entry 2 Input voltage (V) Description 0-0.31 VOL UP 0.32-0.94 VOL DOWN 0.95-1.57 TV/VIDEO
93	SD_RESET	Output port	Sound delay IC reset H: Normal L: Reset
94	OPC	AD	Auto save sensor level input
95	VHOLD2	VHOLD2	Pull-down
96	HLF2	HLF2	Pull-down
97	CNIN2	CVIN2	Pull-up
98	TVSETB	TVSETB	GND
99	VCCE	Vcce	Power supply (5V)
100	CVIN	CVIN1	Pull-up

Pin functions of VPC IC (IC801) VH-iVPC3230D1EQ

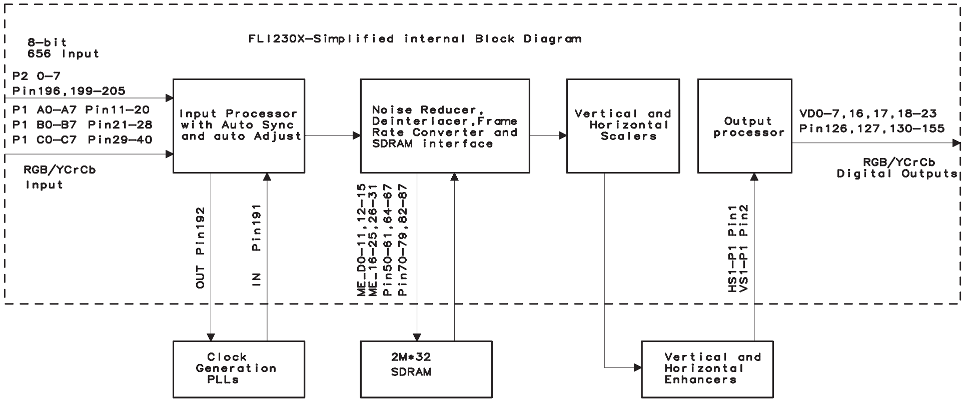
Pin No.	Pin Name	I/O	Pin Function
1	B1/CB1IN	I	Blue1/Cb1 Analog Component Input
2	G1/Y1IN	I	Green1/Y1 Analog Component Input
3	R1/CR1IN	I	Red1/Cr1 Analog Component Input
4	B2/CB2IN	I	Blue2/Cb2 Analog Component Input
5	G2/Y2IN	I	Green2/Y2 Analog Component Input
6	R2/CR2IN	I	Red2/Cr2 Analog Component Input
7	ASGF	-	Analog Shield GNDF
8	NC	-	Not Connected
9	VSUPCAP	SUPPLYD	Supply Voltage, Digital Decoupling Circuitry
10	VSUPD	SUPPLYD	Supply Voltage, Digital Circuitry
11	GNDD	SUPPLYD	Ground, Digital Circuiitry
12	GNDCAP	SUPPLYD	Ground, Digital Decooupling Circuiitry
13	SCL	I/O	I2C Bus Data
14	SDA	I/O	I2C Bus Data
15	RESQ	I	Reset Input, Active Low
16	TEST	I	Test Pin, connect to GNDD
17	VGAV	I	VGAV Input
18	YCOEQ	I	Y/C Output Enable Input, Active Low
19	FFIE	O	FIFO Input Enable
20	FFWE	O	FIFO Write Enable
21	FFRSTW	O	FIFO Reset Write/Read
22	FFRE	O	FIFO Read Enable
23	FFOE	O	FIFO Output Enable
24	CLK20	I/O	Main Clock Output 20.25MHz
25	GNDPA	SUPPLYD	Ground, Pad Decoupling Circuitry
26	VSUPPA	SUPPLYD	Supply Voltage, Pad Decoupling Circuitry
27	LLC2	O	Double Clock Output
28	LLC1	I/O	Clock Output
29	VSUPLLC	SUPPLYD	Supply Voltage, LLC Circuitry
30	GNDLLC	SUPPLYD	Ground, LLC Circuitry
31	Y7	O	Picture Bus Luma (MSB)
32	Y6	O	Picture Bus Luma
33	Y5	O	Picture Bus Luma
34	Y4	O	Picture Bus Luma
35	GNDY	SUPPLYD	Ground, Luma Output Circuitry
36	VSUPY	SUPPLYD	Supply Voltage, Luma Output Circuitry
37	Y3	O	Picture Bus Luma
38	Y2	O	Picture Bus Luma
39	Y1	O	Picture Bus Luma
40	Y0	O	Picture Bus Luma (LSB)
41	C7	O	Picture Bus Chroma (MSB)
42	C6	O	Picture Bus Chroma
43	C5	O	Picture Bus Chroma
44	C4	O	Picture Bus Chroma
45	VSUPC	SUPPLYD	Supply Voltage, Chroma Output Circuitry
46	GNDC	SUPPLYD	Ground, Chroma Output Circuitry
47	C3	O	Picture Bus Chroma
48	C2	O	Picture Bus Chroma
49	C1	O	Picture Bus Chroma
50	C0	O	Picture Bus Chroma (LSB)
51	GNDSY	SUPPLYD	Ground, Cync Pad Circuitry
52	VSUPSY	SUPPLYD	Supply Voltage, Cync Pad Circuitry
53	INTLC	O	Interlace Output
54	AVO	O	Active Video Output
55	FSY/HC	O	Front Sync/Horizontal Clamp Pulse
56	MSY/HS	I/O	Main Sync/Horizontal Sync Pulse
57	VSUPSY	O	Vertical Sync Pulse
58	FPDAT	I/O	Front-End/Back-End Data
59	VSTBY	SUPPLYD	Standby Supply Voltage
60	CLK5	O	CCU 5MHz Clock Output
61	NC	-	Not Connected
62	XTAL1	I	Analog Crystal Input
63	XTAL2	O	Analog Crystal Output
64	ASGF	-	Analog Shield GNDf
65	GNDF	SUPPLYD	Ground, Analog Front-End
66	VRT	O	Reference Voltage Top, Analog
67	I2CSEL	I	I2C Bus Address Select
68	ISGND	SUPPLYD	Signal Ground for Analog Input, connect to GNDF
69	VSUPF	SUPPLYD	Supply Voltage, Analog Front-End
70	VOUT	O	Analog Video Output
71	CIN	I	Chroma/Analog Video 5 Input
72	VIN1	I	Video 1 Analog Input
73	VIN2	I	Video 2 Analog Input
74	VIN3	I	Video 3 Analog Input
75	VIN4	I	Video 4 Analog Input
76	VSUPAI	SUPPLYD	Supply Voltage, Analog Component Inputs Front-End
77	GNDAI	SUPPLYD	Ground, Analog Component Inputs Front-End
78	VREF	O	Reference Voltage Top, Analog Component Inputs, connected to GNDAI
79	FB1IN	I	Fast Blank Input
80	AISGND	SUPPLYD	Signal Ground for Analog Component Input, connect to GNDAI

VHiVPC3230D1EQ (ASSY:IC801)
VPC (Video Processor)
BLOCK DIAGRAM



71 CIN
72 VIN1
73 VIN2
74 VIN3
75 VIN4
70 VOUT
1,2,3
RGB/YCrCb–1
79
FB1IN
4,5,6
RGB/YCrCb–2
ANALOG
FRONT–END
AGC
2xADC
ADAPTIVE
COMB
FILTER
NTSC
PAL
COLOR
DECODER
NTSC
PAL
SECAM
SATURATION
TINT
Y
Cr
Cb
MIXER
Y
Cr
Cb
2D SCALER
PIP
PANORAMA
MODE
CONTRAST
BRIGHTNESS
PEAKING
OUTPUT
FORMATTER
ITU–R656
ITU–R601
MEMORY
CONTROL
31–34,37–40
Y[7;0] OUT
CrCb OUT
41–44,47–50
C[7;0]
YCOE
31–34,37–40
Y[7;0]
FIFO CNTL
FFIE,FFWE,FFRSTW,
FFRE,FFOE 19–23
ANALOG
COMPONENT
FRONT–END
AGC
4xADC
Y/G
U/B
V/R
FB
PROCESSING
MATRIX
CONTRAST
SATURATION
BRIGHTNESS
TINT
Y
Cr
Cb
FB
I2C BUS
CLOCK
GEN.
SYNC
+
CLOCK
GENERATION
CLOCK
LL[2;1] 27,28
HSYNC
FSY/HC/HSYA
MSY/HS 55,56
VSYNC
FPDAT/VSYA
VS 58,57
AVO 54
SCL
13
SDA
14
XTAL1
62
XTAL2
63
I2C BUS
2025MHz

VHiFLi2310/-1Q (ASSY:IC4601)
SCALER (Digital Video Format Converter)
BLOCK DIAGRAM

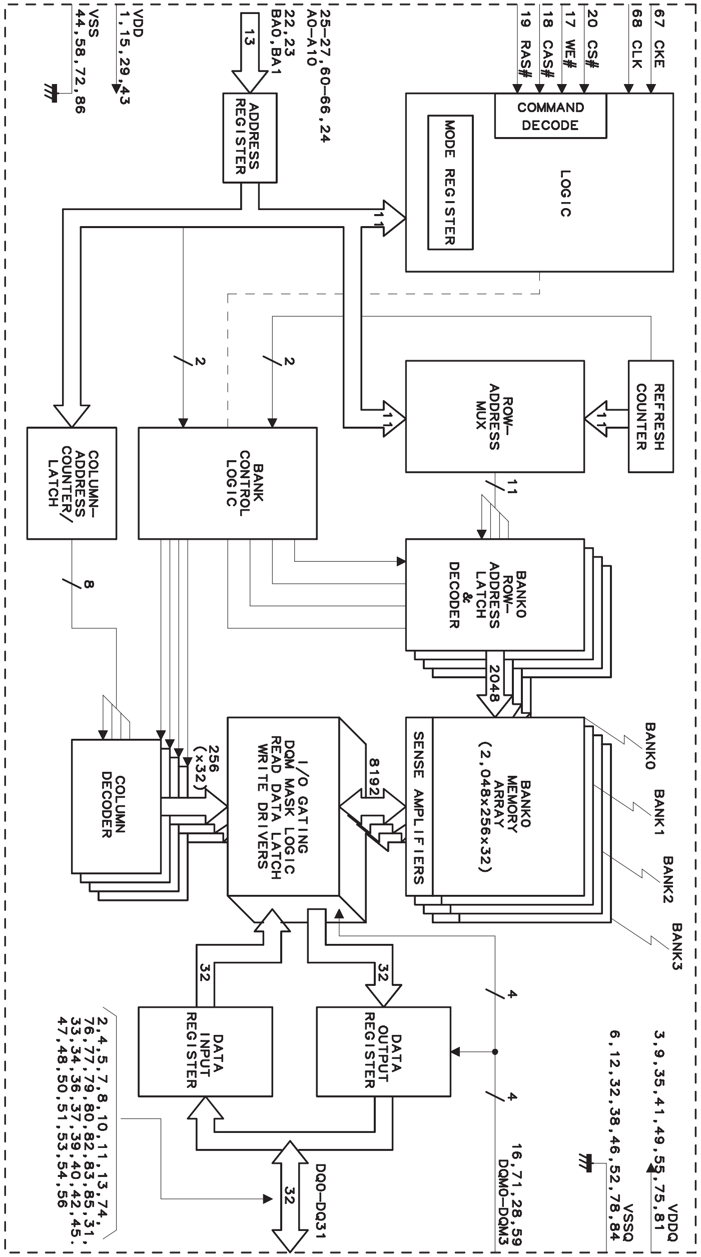


Pin functions of SCALER IC (IC4601) VHiFLi2310/-1Q

Pin No.	Pin Name	I/O	Pin Function
1	HSYNC1 PORT1	I	Horizontal sync or reference -CTL 1 or Port 1
2	VSYNC1 PORT1	I	Vertical sync or reference -CTL 1 or Port 1
3	FIELD ID1_PORT1	I	Odd/Even Field identification -CTL1 or Port 1
4	IN_CLK1_PORT1	I	Data Clock input -CTL1 of Port 1
5	HSYNC2 PORT1	I	Horizontal sync or reference -CTL 2 or Port 1
6	VSYNC2PORT1	I	Vertical sync or reference -CTL 2 or Port 1
7	FIELD ID2_PORT1	I	Odd/Even Field identification -CTL2 or Port 1
8	VDD1	-	3.3v-Power pin for IO
9	VSS	-	Ground
10	IN_CLK2_PORT1	I	Data Clock input-CTL2 of Port 1
11	B/Cb/D1_0	I	Port 1-Digital Video input (Blue/Cb/D1)
12	B/Cb/D1_1	I	Port 1-Digital Video input (Blue/Cb/D1)
13	B/Cb/D1_2	I	Port 1-Digital Video input (Blue/Cb/D1)
14	B/Cb/D1_3	I	Port 1-Digital Video input (Blue/Cb/D1)
15	B/Cb/D1_4	I	Port 1-Digital Video input (Blue/Cb/D1)
16	VDDcore1	-	1.8V-Power pin for core
17	VSS	-	Ground
18	B/Cb/D1_5	I	Port 1-Digital Video input (Blue/Cb/D1)
19	B/Cb/D1_6	I	Port 1-Digital Video input (Blue/Cb/D1)
20	B/Cb/D1_7	I	Port 1-Digital Video input (Blue/Cb/D1)
21	R/Cr/CrCb_0	I	Port 1-Digital Video input (Red/Cr/CrCb)
22	R/Cr/CrCb_1	I	Port 1-Digital Video input (Red/Cr/CrCb)
23	R/Cr/CrCb_2	I	Port 1-Digital Video input (Red/Cr/CrCb)
24	R/Cr/CrCb_3	I	Port 1-Digital Video input (Red/Cr/CrCb)
25	R/Cr/CrCb_4	I	Port 1-Digital Video input (Red/Cr/CrCb)
26	R/Cr/CrCb_5	I	Port 1-Digital Video input (Red/Cr/CrCb)
27	R/Cr/CrCb_6	I	Port 1-Digital Video input (Red/Cr/CrCb)
28	R/Cr/CrCb_7	I	Port 1-Digital Video input (Red/Cr/CrCb)
29	G/Y/Y_0	I	Port 1-Digital Video input (Green/Y)
30	VDD2	I	3.3v-Power pin for IO
31	VSS	I	Ground
32	G/Y/Y_1	I	Port 1-Digital Video input (Green/Y)
33	G/Y/Y_2	I	Port 1-Digital Video input (Green/Y)
34	G/Y/Y_3	I	Port 1-Digital Video input (Green/Y)
35	G/Y/Y_4	I	Port 1-Digital Video input (Green/Y)
36	VDDcore2	-	1.8V-Power pin for core
37	VSS	-	Ground
38	G/Y/Y_5	I	Port 1-Digital Video input (Green/Y)
39	G/Y/Y_6	I	Port 1-Digital Video input (Green/Y)
40	G/Y/Y_7	I	Port 1-Digital Video input (Green/Y)
41	IN_SEL	O	Output to select external video mux
42	TEST	I	Connect to Ground
43	DEV ADDR1	I	Device address setting 1
44	DEV ADDR0	I	Device address setting 0
45	SCLK	I/O	2-wire serial control bus clock
46	SDATA	I/O	2-wire serial control bus data
47	RESET_N	I	Reset
48	VDD3	-	3.3V-Power pin for IO
49	VSS	-	Ground
50	SDRAM DATA(0)	I/O	SDRAM data bus*
51	SDRAM DATA(1)	I/O	SDRAM data bus*
52	SDRAM DATA(2)	I/O	SDRAM data bus*
53	SDRAM DATA(3)	I/O	SDRAM data bus*
54	SDRAM DATA(4)	I/O	SDRAM data bus*
55	SDRAM DATA(5)	I/O	SDRAM data bus*
56	SDRAM DATA(6)	I/O	SDRAM data bus*
57	SDRAM DATA(7)	I/O	SDRAM data bus*
58	SDRAM DATA(8)	I/O	SDRAM data bus*
59	SDRAM DATA(9)	I/O	SDRAM data bus*
60	SDRAM DATA(10)	I/O	SDRAM data bus*
61	SDRAM DATA(11)	I/O	SDRAM data bus*
62	VDD4	-	3.3V-Power pin for IO
63	VSS	-	Ground
64	SDRAM DATA(12)	I/O	SDRAM data bus*
65	SDRAM DATA(13)	I/O	SDRAM data bus*
66	SDRAM DATA(14)	I/O	SDRAM data bus*
67	SDRAM DATA(15)	I/O	SDRAM data bus*
68	VDDcore3	-	1.8V-Power pin for core
69	VSS	-	Ground
70	SDRAM DATA(16)	I/O	SDRAM data bus*
71	SDRAM DATA(17)	I/O	SDRAM data bus*
72	SDRAM DATA(18)	I/O	SDRAM data bus*
73	SDRAM DATA(19)	I/O	SDRAM data bus*
74	SDRAM DATA(20)	I/O	SDRAM data bus*
75	SDRAM DATA(21)	I/O	SDRAM data bus*
76	SDRAM DATA(22)	I/O	SDRAM data bus*
77	SDRAM DATA(23)	I/O	SDRAM data bus*
78	SDRAM DATA(24)	I/O	SDRAM data bus*
79	SDRAM DATA(25)	I/O	SDRAM data bus*
80	VDDcore4	-	1.8V-Power pin for core
81	VSS	-	Ground
82	SDRAM DATA(26)	I/O	SDRAM data bus*
83	SDRAM DATA(27)	I/O	SDRAM data bus*
84	SDRAM DATA(28)	I/O	SDRAM data bus*
85	SDRAM DATA(29)	I/O	SDRAM data bus*
86	SDRAM DATA(30)	I/O	SDRAM data bus*
87	SDRAM DATA(31)	I/O	SDRAM data bus*
88	VDD5	-	3.3V-Power pin for IO
89	VSS	-	Ground
90	TEST IN	I	Test input-Connect to ground
91	SDRAM ADDR(10)	O/P	SDRAM data bus*
92	SDRAM ADDR(9)	O/P	SDRAM data bus*
93	SDRAM ADDR(8)	O/P	SDRAM data bus*
94	SDRAM ADDR(7)	O/P	SDRAM data bus*
95	SDRAM ADDR(6)	O/P	SDRAM data bus*
96	VDDcore5	-	1.8V-Power pin for core
97	VSS	-	Ground
98	SDRAM ADDR(5)	O/P	SDRAM data bus*
99	SDRAM ADDR(4)	O/P	SDRAM data bus*
100	SDRAM ADDR(3)	O/P	SDRAM data bus*
101	SDRAM ADDR(2)	O/P	SDRAM data bus*
102	SDRAM ADDR(1)	O/P	SDRAM data bus*
103	SDRAM ADDR(0)	O/P	SDRAM data bus*
104	SDRAM WEN	O/P	SDRAM write enable*
105	SDRAM RASN	O/P	SDRAM row address select*
106	SDRAM CASN	O/P	SDRAM column addres select*
107	SDRAM BA1	O/P	SDRAM bank select 1*
108	SDRAM BA0	O/P	SDRAM bank select 0*
109	SDRAM CSN	O/P	SDRAM CS*
110	SDRAM DOM	O/P	SDRAM DOM*
111	SDRAM CLKOUT	O/P	Clock out to SDRAM*
112	VDD6	-	3.3V-Power pin for IO
113	VSS	-	Ground
114	SDRAM CLKIN	I	Trace delayed SDRAM Clock in
115	TEST3	I	Test input-Connect to ground
116	TEST OUT0	O	Test output-leave open
117	TEST OUT1	O	Test output-leave open
118	CTLOUT0	O/P	Control signal output selectable as Hsync I/O Csync/Href/Monitor coast
119	CTLOUT1	O/P	Control signal output selectable as Vsync I/O Ref/Vref/Film indicator
120	CTLOUT2	O/P	Control signal output selectable as Monitor coast/Href/VDD en/HSync2
121	CTLOUT3	O/P	Control signal output selectable as Film Indicator/Vref/backlight en/VSync2
122	CTLOUT4	O/P	Control signal output selectable as Cref/Fieid ID/Csync/Monitor coast
123	VDDcore6	-	1.8V-Power pin for core
124	VSS	-	Ground
125	CLKOUT	O/P	Output data rate clock

126	B/U/Pb_OUT 0	O/P	Digital video output-Blue/U/Pb
127	B/U/Pb_OUT 1	O/P	Digital video output-Blue/U/Pb
128	VDD7	-	3.3V-Power pin for IO
129	VSS	-	Ground
130	B/U/Pb_OUT 2	O/P	Digital video output-Blue/U/Pb
131	B/U/Pb_OUT 3	O/P	Digital video output-Blue/U/Pb
132	B/U/Pb_OUT 4	O/P	Digital video output-Blue/U/Pb
133	B/U/Pb_OUT 5	O/P	Digital video output-Blue/U/Pb
134	B/U/Pb_OUT 6	O/P	Digital video output-Blue/U/Pb
135	B/U/Pb_OUT 7	O/P	Digital video output-Blue/U/Pb
136	R/V/Pr_OUT_0	O/P	Digital video output-Red/V/Pr
137	R/V/Pr_OUT_1	O/P	Digital video output-Red/V/Pr
138	VDDcore7	-	1.8V-Power pin for core
139	VSS	-	Ground
140	R/V/Pr_OUT_2	O/P	Digital video output-Red/V/Pr
141	R/V/Pr_OUT_3	O/P	Digital video output-Red/V/Pr
142	R/V/Pr_OUT_4	O/P	Digital video output-Red/V/Pr
143	R/V/Pr_OUT_5	O/P	Digital video output-Red/V/Pr
144	R/V/Pr_OUT_6	O/P	Digital video output-Red/V/Pr
145	R/V/Pr_OUT_7	O/P	Digital video output-Red/V/Pr
146	VDD8	-	3.3V-Power pin for IO
147	VSS	-	Ground
148	G/Y/Y OUT_0	O/P	Digital video output-Green/Y
149	G/Y/Y OUT_1	O/P	Digital video output-Green/Y
150	G/Y/Y OUT_2	O/P	Digital video output-Green/Y
151	G/Y/Y OUT_3	O/P	Digital video output-Green/Y
152	G/Y/Y OUT_4	O/P	Digital video output-Green/Y
153	G/Y/Y OUT_5	O/P	Digital video output-Green/Y
154	G/Y/Y OUT_6	O/P	Digital video output-Green/Y
155	G/Y/Y OUT_7	O/P	Digital video output-Green/Y
156	OE	I	Output data Enable for Digital video output
157	PLL PVDD	-	1.8V-Power pin for core
158	PLL PVSS	-	Ground for PLL pads
159	AVSS PLL BE1	-	PLL Ground
160	AVDD PLL BE1	-	1.8V-Power pin for core
161	AVSS PLL BE2	-	1.8V-Power pin for core
162	AVDD PLL BE2	-	PLL Ground
163	AVSS_PLL_SDI	-	PLL Ground
164	AVDD_PLL_SDI	-	1.8V-Power pin for core
165	AVDD PLL FE	-	1.8V-Power pin for core
166	AVSS PLL_FE	-	PLL Ground
167	DAC_PVSS	-	Ground for DAC pads
168	DAC_VDD	-	1.8V-Dgital power pin for DAC
169	DAC_VSS	-	DAC Digital Ground
170	DAC_BOUT	-	Analog B/U output
171	DAC_AVDDB	-	3.3V-Analog power pin for B channel
172	DAC_AVSSB	-	Analog Ground for B channel
173	DAC_GOUT	-	Analog G/Y output
174	DAC_AVDDG	-	3.3V-Analog power pin for G channel
175	DAC_AVSSG	-	Analog Ground for G channel
176	DAC_ROUT	-	Analog R/V output
177	DAC_AVDDR	-	3.3V-Analog power pin for R channel
178	DAC_AVSSR	-	Analog Ground for R channel
179	DAC_COMP	O	Compensation for video DACs
180	DAC_REST	O	Current setting resistor for video DACs
181	DAC_VREFOUT	O	1.28V Internally generated voltage reference for video DACs
182	DAC_VREFIN	I	Extenal Voltage reference for video DACs
183	DAC_AVDD	-	3.3V-Analog power pin for DAC
184	DAC_AVSS	-	Analog Ground for DAC
185	DAC_GR_AVSS	-	Ground for DAC guard ring
186	DAC_GR_AVDD	-	3.3V- power pin for DAC guard ring
187	DAC_PVDD	-	3.3V-Power pin for DAC pads
188	TEST0	I	Test pin-connect to ground
189	TEST1	I	Test pin-connect to ground
190	TEST2	I	Test pin-connect to ground
191	XTAL IN	I	External parallel crystal oscillator
192	XTAL OUT	O	External parallel crystal oscillator
193	VDD9	-	3.3V-Power pin for IO
194	VSS	-	Ground
195	CLK PORT 2	I	Port 2-Data Clock input
196	D1_IN_0	I	Port 2-ITU-R BT656 digital data input
197	VDDcore8	I	1.8V-Power pin for core
198	VSS	I	Ground
199	D1_IN_1	I	Port 2-ITU-R BT656 digital data input
200	D1_IN_2	I	Port 2-ITU-R BT656 digital data input
201	D1_IN_3	I	Port 2-ITU-R BT656 digital data input
202	D1_IN_4	I	Port 2-ITU-R BT656 digital data input
203	D1_IN_5	I	Port 2-ITU-R BT656 digital data input
204	D1_IN_6	I	Port 2-ITU-R BT656 digital data input
205	D1_IN_7	I	Port 2-ITU-R BT656 digital data input
206	FIELD ID PORT2	I	Port 2-Odd/Even Field identification
207	VSYNC_PORT2	I	Port 2-Vertical sync or reference
208	HSYNC_PORT2	I	Port 2-Horizontal sync or reference

RH-iXA312WJN1Q (ASSY:IC4516)
64M-SDRAM
BLOCK DIAGRAM


67 CKE
68 CLK
20 CS#
17 WE#
18 CAS#
19 RAS#
COMMAND DECODE
LOGIC
MODE REGISTER
REFRESH COUNTER
11
ROW-ADDRESS MUX
11
BANK0 ROW-ADDRESS LATCH & DECODER
2048
BANK0
BANK1
BANK2
BANK3
BANK0 MEMORY ARRAY (2,048x256x32)
SENSE AMPLIFIERS
VDDQ
3,9,35,41,49,55,75,81
VSSQ
6,12,32,38,46,52,78,84
4
4
16,71,28,59
DQM0-DQM3
25-27,60-66,24
A0-A10
22,23
BA0,BA1
13
ADDRESS REGISTER
11
11
2
2
BANK CONTROL LOGIC
8192
I/O GATING DQM MASK LOGIC READ DATA LATCH WRITE DRIVERS
32
DATA OUTPUT REGISTER
DQ0-DQ31
32
32
DATA INPUT REGISTER
256 (x32)
VDD
1,15,29,43
VSS
44,58,72,86
COLUMN-ADDRESS COUNTER/ LATCH
8
COLUMN DECODER
2,4,5,7,8,10,11,13,74, 76,77,79,80,82,83,85,31, 33,34,36,37,39,40,42,45. 47,48,50,51,53,54,56

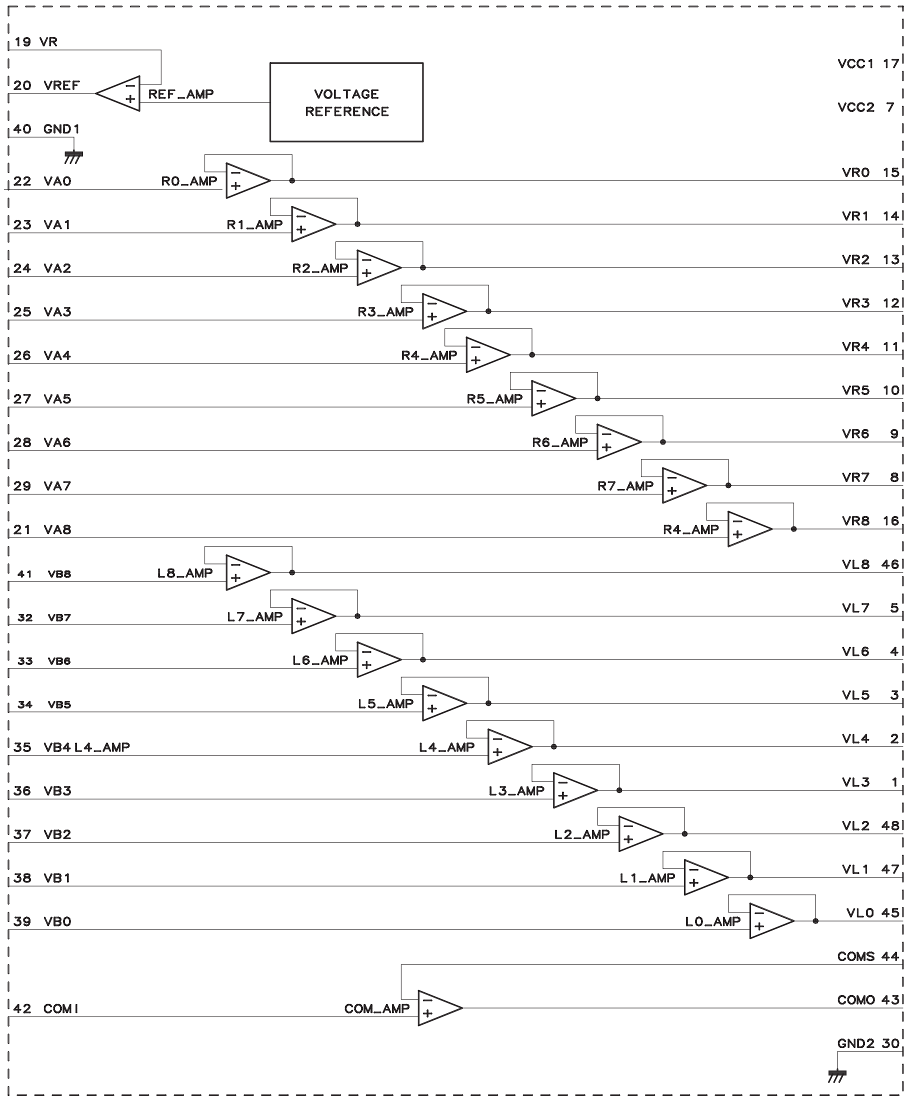
Pin functions of 64M-SDRAM IC (IC4516) RH-iXA312WJN1Q

Pin No.	Pin Name	I/O	Pin Function
68	CLK	I	Clock: CLK is driven by the system clock. All SDRAM input signals are sampledon the positive edge of CLK. CLK also increments the internal burst counter andcontrols the output registers.
67	CKE	I	Clock Enable: CKE activates (HIGH) and deactivates (LOW) the CLK signal.Deactivating the clock provides PRECHARGE POWER-DOWN and SELFREFRESH operation (all banks idle), ACTIVE POWER-DOWN (row active inany bank) or CLOCK SUSPEND operation (burst/access in progress). CKE issynchronous except after the device enters power-down and self refreshmodes, where CKE becomes asynchronous until after exiting the same mode.The input buffers, including CLK, are disabled during power-down and selfrefresh modes, providing low standby power. CKE may be tied HIGH.
20	CS#	I	Chip Select: CS# enables (registered LOW) and disables (registered HIGH) thecommand decoder. All commands are masked when CS# is registered HIGH.CS#provides for external bank selection on systems with multiple banks.CS# is considered part of the command code.
17, 18, 19	WE#, CAS#,RAS#	I	Command Inputs: WE# , CAS#, and RAS# (along with CS#) define thecommand being entered.
16, 71, 28, 59	DQM0-DQM3	I	Input/Output Mask: DQM is sampled HIGH and is an input mask signal for writeaccesses and an output enable signal for read accesses. Input data is maskedduring a WRITE cycle. The output buffers are placed in a High-Z state (two-clock latency) during a READ cycle. DQM0 corresponds to DQ0-DQ7; DQM1corresponds to DQ8-DQ15; DQM2 corresponds to DQ16-DQ23; and DQM3corresponds to DQ24-DQ31. DQM0-DQM3 are considered same state whenreferenced as DQM.
22, 23	BA0, BA1	I	Bank Address Input(s): BA0 and BA1 define to which bank the ACTIVE, READ,WRITE or PRECHARGE command is being applied.
25-27, 60-66, 24	A0-A10.	I	Address Inputs: A0-A10 are sampled during the ACTIVE command (rowaddressA0-A10) and READ/WRITE command (column-address A0-A7 with A10defining auto precharge) to select one location out of the memory array in therespective bank. A10 is sampled during a PRECHARGE command to determineif all banks are to be precharged (A10 HIGH) or bank selected by BA0, BA1(LOW). The address inputs also provide the op-code during a LOAD MODE REGISTER command.
2, 4, 5, 7, 8, 10,11, 13,74, 76, 77, 79,80, 82, 83,85, 31, 33, 34,36, 37, 39,40, 42, 45, 47, 48, 50, 51, 53	DQ0-DQ31	I/O	Data I/O: Data bus.
14, 21, 30, 57,69,70, 73	NC	—	No Connect: These pins should be left unconnected.
3, 9, 35, 41, 49,55, 75, 81	N.C.	—	DQ Power Supply: Isolated on the die for improved noise immunity.
6, 12, 32, 38,46, 52, 78,	VR4	O	DQ Ground: Provide isolated ground to DQs for improved noise immunity.
1, 15, 29, 43	VR3	O	Power Supply: +3.3V ±0.3V.
44, 58, 72, 86	N.C.	—	Ground.

Pin functions of QS-LCD CONTROL IC (IC4512) RH-iXA595WJN1Q

Pin No.	Pin Name	I/O	Pin Function
1,2,51,52,85,105,106,116,127,135,142,149,155,156,164,172,181	GND		
3	G S P2	O	Gate driver start pulse 2
4	POWER	O	Gate driver output enable
5	G CK	O	Gate driver clock
6	G L BR	O	Gate driver up/down reverse setting
7	G S P1	O	Gate driver start pulse 1
8	O EM	O	SLOPE A
9	OEM_INV	O	SLOPE B
10	O F L1	O	Lamp dimming control 1
11	O F L2	I	Lamp dimming control 2
12	MP_CS	I	Microcomputer communication CS
13	MP_DA	I	Microcomputer communication Write Data
14	MP_CK	O	Microcomputer communication Write Clock
15	MP_RCS	O	Microcomputer communication Read CS
16	MP_RDA	O	Microcomputer communication Read Data
17	G ND	I	
18	OSD_CK	O	OSD display clock output
19	OSD_VD	O	OSD vertical synchronizing signal output
20	OSD_HD	O	OSD horizontal synchronizing signal output
21-24	OSD_0-3	I	OSD input signals 0-3
25	OSD_BLK	I	OSD BLANKING input
26-28	TEXT_R,G,B	I	European teletext decoder R,G,B
29	TEXT_BLK	I	European teletext decoder BLK input
30-37	G I N0-7	I	Green input
38-45	R I N0-7	I	Red input
46-50,55-57	BIN0-7	I	Blue data input
53,54,88,103,104,122,137,146,157,158,168	VDD		
58	POL_O	O	POL
59	POL_E	O	POL
60	PQ_OFF	I	
61	HSYNC	I	Horizontal synchronizing signal input
62	VSYNC	I	Vertical synchronizing signal input
63	DE	I	Data enable input
64	P_MODE	I	Dot reverse/line reverse setting
65	RST	I	
66	SEL_CTRL	I	Microcomputer setting/EEPROM
67	CLK	I	27MHz input
68	TEST3	I	Test setting
69	CLK_2X	I	SDRAM clock reference signal
70	TEST2	I	Test setting
71	TEST1	I	Test setting
72	EEROM_DI	I	EEPROM Read Data
73	TEST0	I	Test setting
74	EEROM_DO	O	EEPROM Write Data
75	EEROM_CS	O	EEPROM chip select
76	EEROM_CK	O	EEPROM clock signal
77	TSENS_CS	O	Temperature sensor chip select
78	TSENS_DA	I	Temperature sensor Read Data
79	TSENS_CK	O	Temperature sensor clock
80-81	BA1-BA0	O	SDRAM bank address
82-84	MA10-MA8		SDRAM data bus
86-87	MA7-MA6		SDRAM data bus
89-94	MA5-MA0		SDRAM data bus
96	CLKE	I	SDRAM IF
97	RAS	I	SDRAM IF
98	CAS	I	SDRAM IF
99	WE	I	SDRAM IF
100	CS	I	SDRAM IF
101	DQM	I	SDRAM IF
102	MEMCLK	I	SDRAM IF
107-115	MD_23-MD_15		SDRAM data bus
117-121	MD_14-MD_10		SDRAM data bus
123-126	MD_9-MD_6		SDRAM data bus
128-133	MD_5-MD_0		SDRAM data bus
134,136,138-141,143,144	OOB0-OOB7		Output data (Blue Odd)
145,147,148,150-154	OEB0-OEB7		Output data (Blue Even)
159,160-163,165-167	OEG0		Output data ((Green Even)
169	OCK		Source driver clock
170	LBR	T	Left/right reverse setting
171	REV	T	REV
173	LS	O	Source driver latch signal
174	SPRS	T	Source driver start signal
175	SPLS	T	Source driver start signal
176,186,197	VDD	O	
177-180,182-185	OOG0-OOG7	O	Output data (Green Odd)
187,189-193,195,196	OOR0-OOR7	O	Output data (Red Odd)
198-200,202-206	OER0-OER7	O	Output data ((Red Even)
188,194	GND	O	

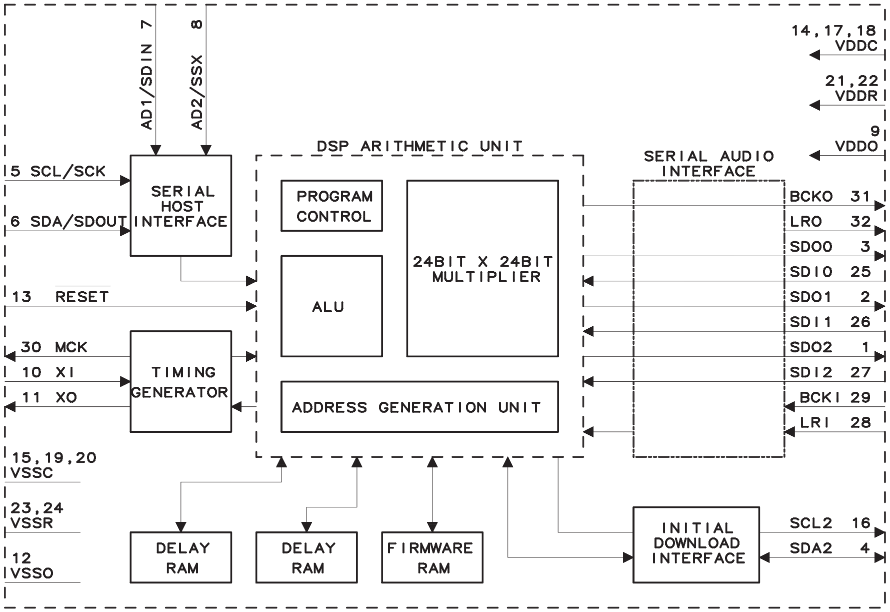
RH-iXA706WJZZQ (ASSY:IC4701)
GRAY-LEVEL
BLOCK DIAGRAM


19 VR
20 VREF
REF_AMP
VOLTAGE REFERENCE
40 GND1
VCC1 17
VCC2 7
22 VA0
R0_AMP
VR0 15
23 VA1
R1_AMP
VR1 14
24 VA2
R2_AMP
VR2 13
25 VA3
R3_AMP
VR3 12
26 VA4
R4_AMP
VR4 11
27 VA5
R5_AMP
VR5 10
28 VA6
R6_AMP
VR6 9
29 VA7
R7_AMP
VR7 8
21 VA8
R4_AMP
VR8 16
41 VB8
L8_AMP
VL8 46
32 VB7
L7_AMP
VL7 5
33 VB6
L6_AMP
VL6 4
34 VB5
L5_AMP
VL5 3
35 VB4 L4_AMP
L4_AMP
VL4 2
36 VB3
L3_AMP
VL3 1
37 VB2
L2_AMP
VL2 48
38 VB1
L1_AMP
VL1 47
39 VB0
L0_AMP
VL0 45
COMS 44
42 COMI
COM_AMP
COMO 43
GND2 30

Pin functions of GRAY-LEVEL IC (IC4701) RH-iXA706WJZZQ

Pin No.	Pin Name	I/O	Pin Function
1	VL3	O	L3 amplifier output.
2	VL4	O	L4 amplifier output.
3	VL5	O	L5 amplifier output.
4	VL6	O	L6 amplifier output.
5	VL7	O	L7 amplifier output.
6	N.C.	—	Non-connected terminal
7	VCC2	—	Power supply terminal.
8	VR7	O	R7 amplifier output.
9	VR6	O	R6 amplifier output.
10	VR5	O	R5 amplifier output.
11	VR4	O	R4 amplifier output.
12	VR3	O	R3 amplifier output.
13	VR2	O	R2 amplifier output.
14	VR10	O	R1 amplifier output.
15	VR0	O	R0 amplifier output.
16	VR8	O	R8 amplifier output.
17	VCC1	—	Power supply terminal.
18	N.C.	—	Non-connected terminal
19	VR	I	REF amplifier reference input terminal.
20	VREF	O	REF amplifier output.
21	VA8	I	R8 amplifier reference input terminal.
22	VA0	I	R0 amplifier reference input terminal.
23	VA1	I	R1 amplifier reference input terminal.
24	VA2	I	R2 amplifier reference input terminal.
25	VA3	I	R3 amplifier reference input terminal.
26	VA4	I	R4 amplifier reference input terminal.
27	VA5	I	R5 amplifier reference input terminal.
28	VA6	I	R6 amplifier reference input terminal.
29	VA7	I	R7 amplifier reference input terminal.
30	GND2	—	Ground terminal.(for OP amplifier)
31	N.C.	—	Non-connected terminal.
32	VB7	I	L7 amplifier reference input terminal.
33	VB6	I	L6 amplifier reference input terminal.
34	VB5	I	L5 amplifier reference input terminal.
35	VB4	I	L4 amplifier reference input terminal.
36	VB3	I	L3 amplifier reference input terminal.
37	VB2	I	L2 amplifier reference input terminal.
38	VB1	I	L1 amplifier reference input terminal.
39	VB0	I	L0 amplifier reference input terminal.
40	GND1	—	Ground terminal.
41	VB8	I	L8 amplifier reference input terminal.
42	COMI	I	COM amplifier input terminal
43	COMO	O	COM amplifier output.
44	COMS	I	COM amplifier reversal input terminal
45	VL0	O	L0 amplifier output.
46	VL8	O	L8 amplifier output.
47	VL1	O	L1 amplifier output.
48	VL2	O	L2 amplifier output.

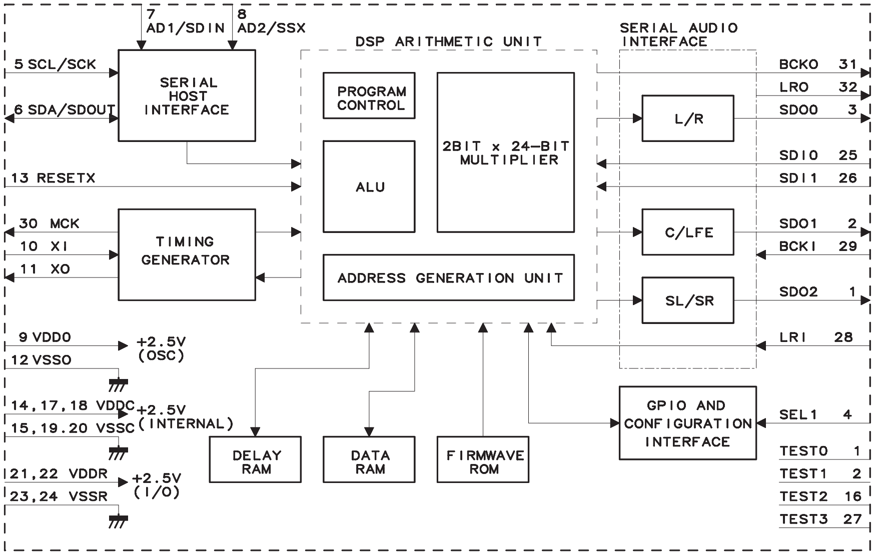
VHiNJU26150-1Q (ASSY:IC3405)
SOUND DSP
BLOCK DIAGRAM


7 AD1/SDIN
8 AD2/SSX
14,17,18 VDDC
21,22 VDDR
9 VDDO
5 SCL/SCK
6 SDA/SDOUT
SERIAL HOST INTERFACE
DSP ARITHMETIC UNIT
PROGRAM CONTROL
24BIT X 24BIT MULTIPLIER
ALU
ADDRESS GENERATION UNIT
SERIAL AUDIO INTERFACE
13 RESET
30 MCK
10 XI
11 XO
TIMING GENERATOR
15,19,20 VSSC
23,24 VSSR
12 VSSO
DELAY RAM
DELAY RAM
FIRMWARE RAM
INITIAL DOWNLOAD INTERFACE
BCKO 31
LRO 32
SDO0 3
SDI0 25
SDO1 2
SDI1 26
SDO2 1
SDI2 27
BCKI 29
LRI 28
SCL2 16
SDA2 4

Pin functions of SOUND DSP IC (IC3405) VH-iNJU26150-1Q

Pin No.	Pin Name	I/O	Pin Function
1	SDO2	O	Sound data output CH2
2	SDO1	O	Sound data output CH1
3	SDO0	O	Sound data output CH0
4	SDA2	I/O	I2C I/O (for download)
5	SCL/SCK	I	I2C clock / serial clock
6	SDA/SDOUT	I/O	I2C I/O / serial out
7	AD1/SDIN	I	I2C address / serial in
8	AD2/SSX	I	I2C address / serial enable
9	VDDO	—	Power supply for oscillator (+2.5V)
10	XI	I	Clock input terminal
11	XO	O	Output for VCO connection
12	VSSO	—	Oscillator power supply GND
13	RESET	I	Reset terminal
14	VDDC	—	Internal power supply +2.5V
15	VSSC	—	Internal power supply GND
16	SCL2	I/O	I2C clock output (for download)
17	VDDC	—	Internal power supply +2.5V
18	VDDC	—	Internal power supply +2.5V
19	VSSC	—	Internal power supply GND
20	VSSC	—	Internal power supply GND
21	VDDR	—	Power supply for I/O (+2.5V)
22	VDDR	—	Power supply for I/O (+2.5V)
23	VSSR	—	I/O ground
24	VSSR	—	I/O ground
25	SDI0	I	Sound data output channel 0
26	SDI1	I	Sound data output channel 1
27	SDI2	I	Sound data output channel 2
28	LRI	I	LR clock input
29	BCKI	I	Bit clock input
30	MCK	O	A/D, D/A clock input
31	BCKO	O	Bit clock output
32	LRO	O	LR clock output

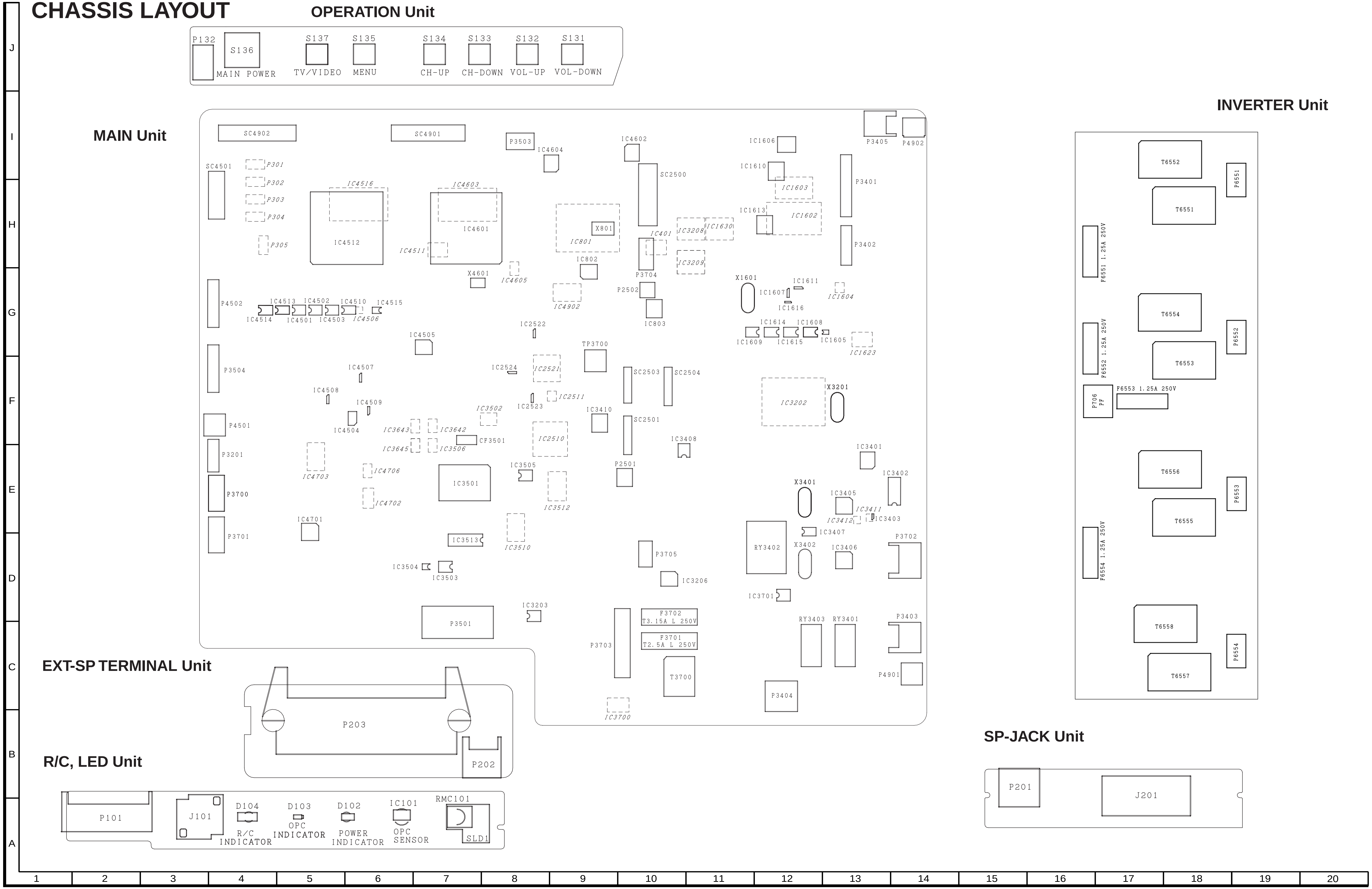
VHiNJU26106-1Q (ASSY:IC3406)
VIRTUAL DOLBY
BLOCK DIAGRAM


7 AD1/SDIN
8 AD2/SSX
5 SCL/SCK
6 SDA/SDOUT
SERIAL HOST INTERFACE
13 RESETX
30 MCK
10 XI
11 XO
TIMING GENERATOR
9 VDDO
12 VSSO
+2.5V (OSC)
14,17,18 VDDC
15,19.20 VSSC
+2.5V (INTERNAL)
21,22 VDDR
23,24 VSSR
+2.5V (I/O)
DSP ARITHMETIC UNIT
PROGRAM CONTROL
ALU
2BIT x 24-BIT MULTIPLIER
ADDRESS GENERATION UNIT
DELAY RAM
DATA RAM
FIRMWAVE ROM
SERIAL AUDIO INTERFACE
L/R
C/LFE
SL/SR
GPIO AND CONFIGURATION INTERFACE
BCKO 31
LRO 32
SDO0 3
SDI0 25
SDI1 26
SDO1 2
BCKI 29
SDO2 1
LRI 28
SEL1 4
TEST0 1
TEST1 2
TEST2 16
TEST3 27

Pin functions of VIRTUAL DOLBY IC (IC3406) VH-iNJU26106-1Q

Pin No.	Pin Name	I/O	Pin Function
1	SDO2	O	Sound data output CH2
2	SDO1	O	Sound data output CH1
3	SDO0	O	Sound data output CH0
4	SDA2	I/O	I2C I/O (for download)
5	SCL/SCK	I	I2C clock / serial clock
6	SDA/SDOUT	I/O	I2C I/O / serial out
7	AD1/SDIN	I	I2C address / serial in
8	AD2/SSX	I	I2C address / serial enable
9	VDDO	—	Power supply for oscillator (+2.5V)
10	XI	I	Clock input terminal
11	XO	O	Output for VCO connection
12	VSSO	—	Oscillator power supply GND
13	RESET	I	Reset terminal
14	VDDC	—	Internal power supply +2.5V
15	VSSC	—	Internal power supply GND
16	SCL2	I/O	I2C clock output (for download)
17	VDDC	—	Internal power supply +2.5V
18	VDDC	—	Internal power supply +2.5V
19	VSSC	—	Internal power supply GND
20	VSSC	—	Internal power supply GND
21	VDDR	—	Power supply for I/O (+2.5V)
22	VDDR	—	Power supply for I/O (+2.5V)
23	VSSR	—	I/O ground
24	VSSR	—	I/O ground
25	SDI0	I	Sound data output channel 0
26	SDI1	I	Sound data output channel 1
27	SDI2	I	Sound data output channel 2
28	LRI	I	LR clock input
29	BCKI	I	Bit clock input
30	MCK	O	A/D, D/A clock input
31	BCKO	O	Bit clock output
32	LRO	O	LR clock output

CHASSIS LAYOUT


OPERATION Unit
P132
S136
MAIN POWER
S137
TV/VIDEO
S135
MENU
S134
CH-UP
S133
CH-DOWN
S132
VOL-UP
S131
VOL-DOWN
MAIN Unit
SC4902
SC4901
P3503
IC4604
IC4602
IC1606
P3405
P4902
SC4501
P301
P302
P303
P304
P305
IC4516
IC4603
IC4512
IC4601
IC4511
X4601
IC4605
SC2500
IC1610
IC1603
IC1613
IC1602
P3401
P3402
X801
IC801
IC802
IC401
IC3208
IC1630
IC3209
P3704
P2502
IC803
X1601
IC1611
IC1607
IC1616
IC1604
P4502
IC4513
IC4502
IC4510
IC4515
IC4514
IC4501
IC4503
IC4506
IC4902
IC2522
IC1614
IC1608
IC1609
IC1615
IC1605
IC1623
IC4505
TP3700
P3504
IC4507
IC2524
IC2521
SC2503
SC2504
IC3202
X3201
IC4508
IC4509
IC2523
IC2511
IC3502
IC3410
SC2501
P4501
IC4504
IC3643
IC3642
CF3501
IC3645
IC3506
IC2510
IC3408
IC3401
P3201
IC4703
IC4706
IC3501
IC3505
P2501
IC3402
X3401
IC3405
IC3411
IC3412
IC3403
P3700
IC4702
IC3512
IC4701
P3701
IC3513
IC3510
RY3402
IC3407
X3402
IC3406
P3702
P3705
IC3504
IC3503
IC3206
IC3701
IC3203
F3702
T3.15A L 250V
F3701
T2.5A L 250V
RY3403
RY3401
P3403
P3501
P3703
T3700
P4901
P3404
IC3700
EXT-SP TERMINAL Unit
P203
P202
R/C, LED Unit
P101
J101
D104
R/C
INDICATOR
D103
OPC
INDICATOR
D102
POWER
INDICATOR
IC101
OPC
SENSOR
RMC101
SLD1
INVERTER Unit
T6552
P6551
T6551
F6551 1.25A 250V
T6554
F6552 1.25A 250V
P6552
T6553
P706
FF
F6553 1.25A 250V
T6556
P6553
T6555
F6554 1.25A 250V
T6558
P6554
T6557
SP-JACK Unit
P201
J201
J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
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9
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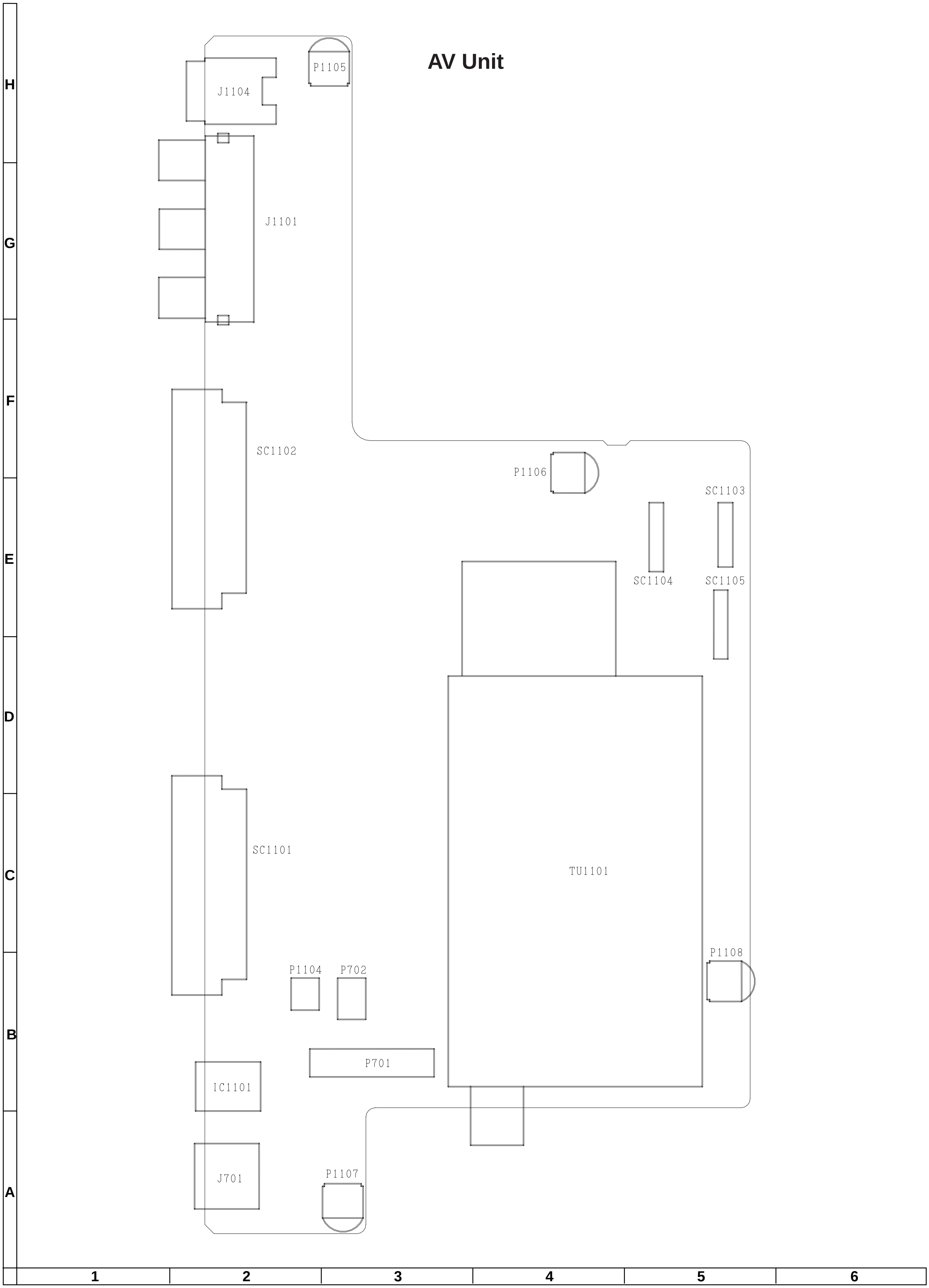
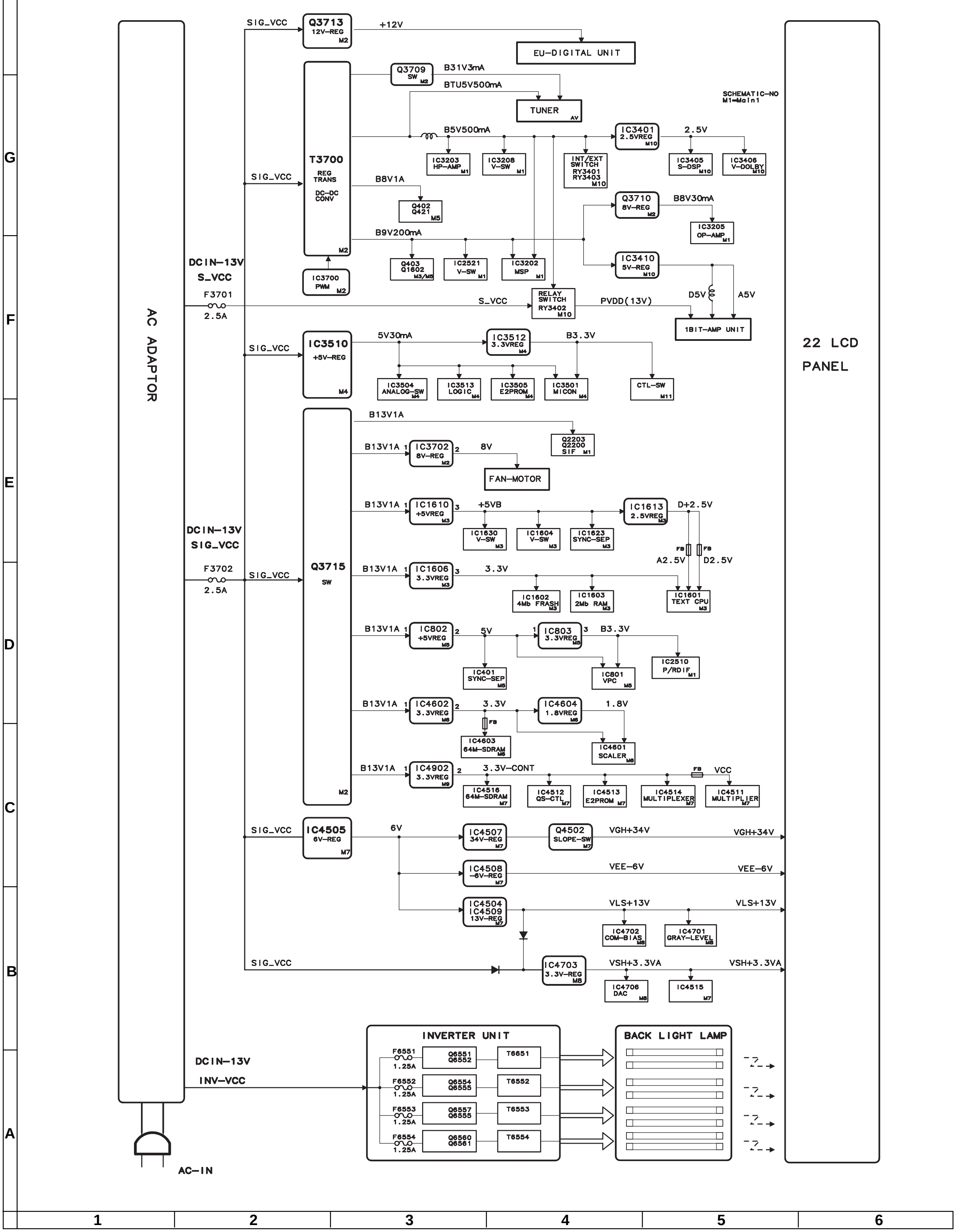
20

AV Unit


J1104
P1105
J1101
SC1102
P1106
SC1103
SC1104
SC1105
SC1101
TU1101
P1108
P1104
P702
P701
IC1101
J701
P1107
H
G
F
E
D
C
B
A
1
2
3
4
5
6

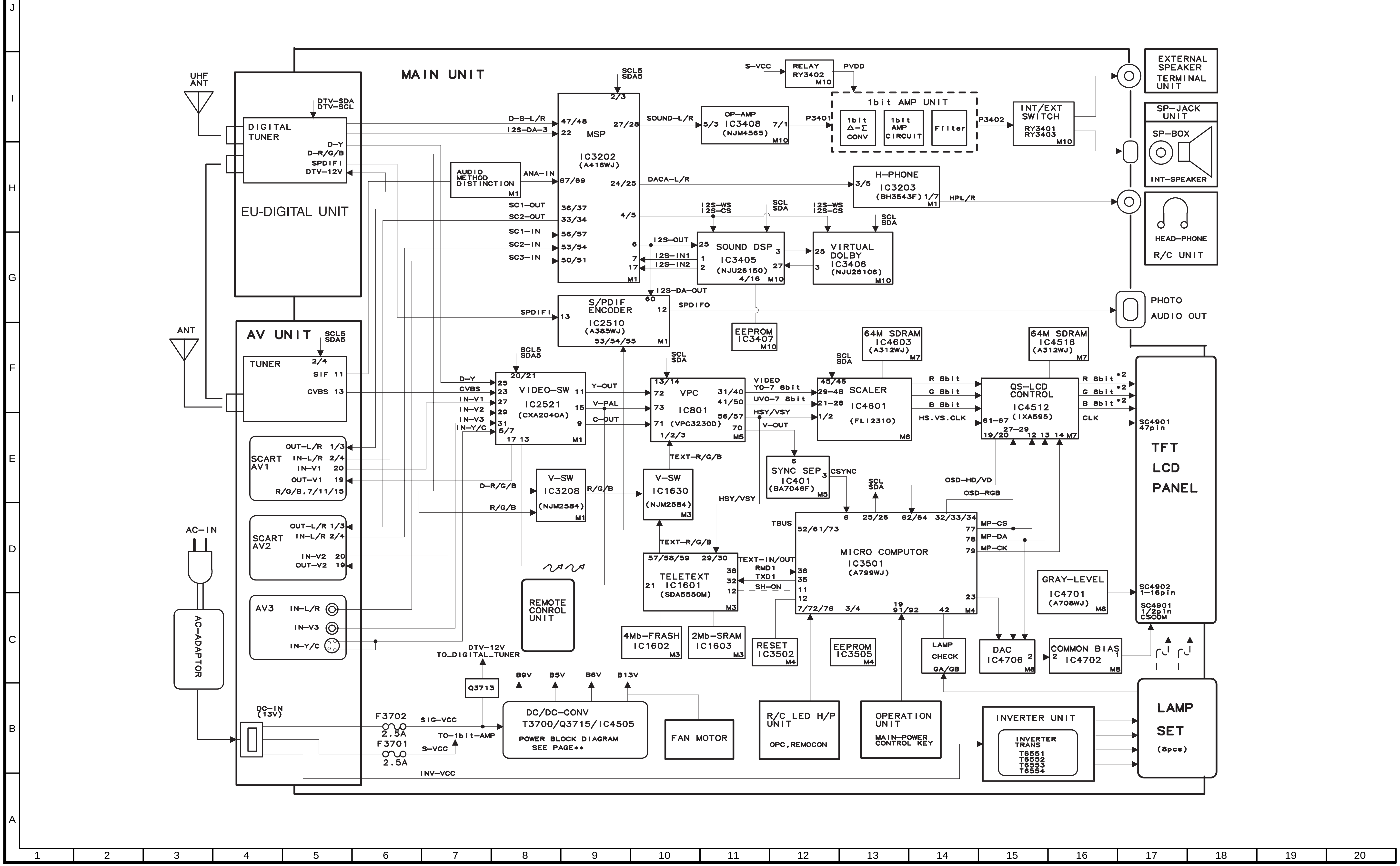
BLOCK DIAGRAM 1/2

POWER-SOURCE BLOCK DIAGRAM

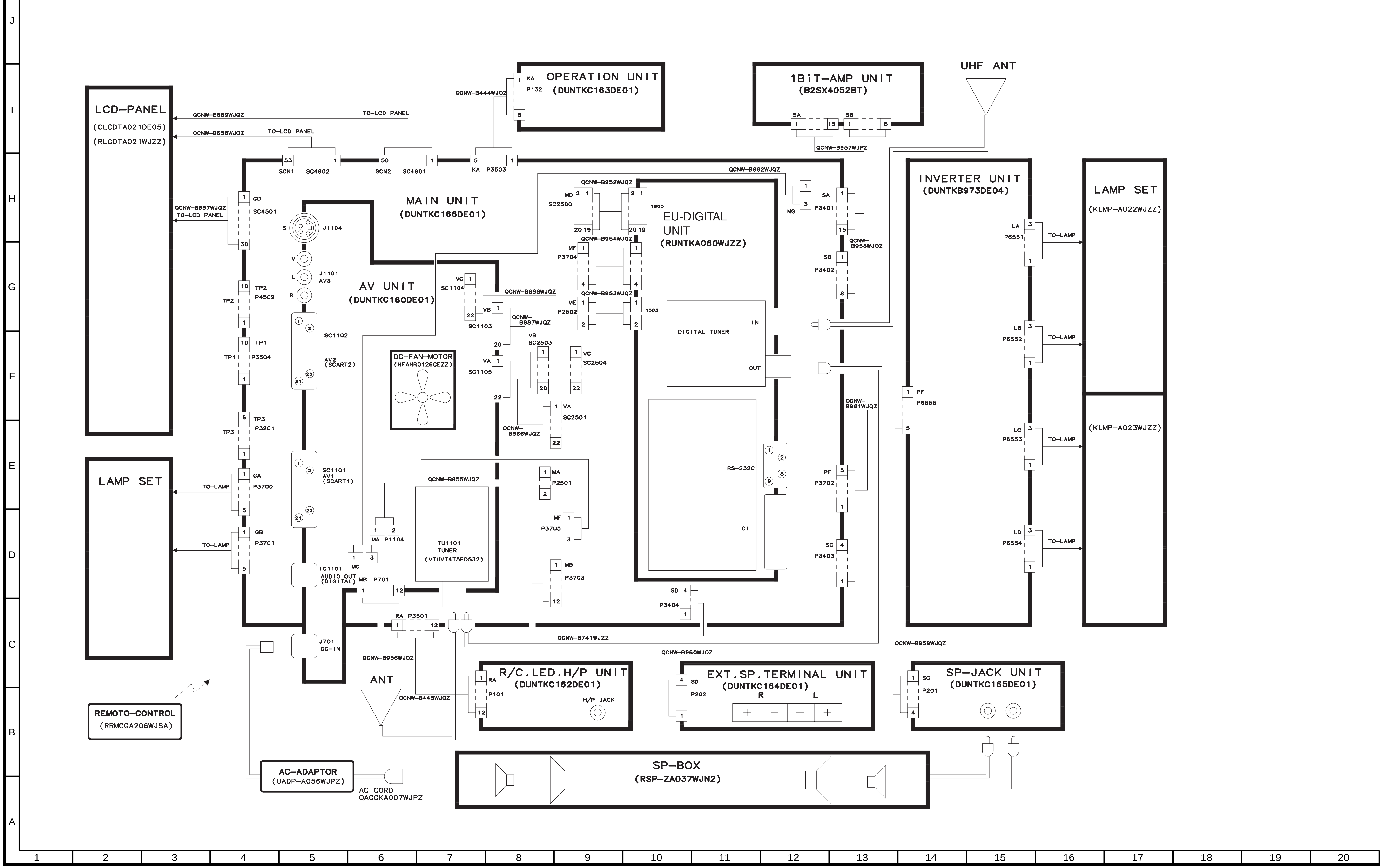

H
G
F
E
D
C
B
A
1
2
3
4
5
6
AC ADAPTOR
AC-IN
DCIN-13V
S_VCC
F3701
2.5A
DCIN-13V
SIG_VCC
F3702
2.5A
DCIN-13V
INV-VCC
SIG_VCC
Q3713
12V-REG
M2
+12V
EU-DIGITAL UNIT
Q3709
SW
M2
B31V3mA
BTU5V500mA
TUNER
AV
SCHEMATIC-NO
M1=Main1
T3700
REG
TRANS
DC-DC
CONV
M2
SIG_VCC
B5V500mA
IC3203
HP-AMP
M1
IC3208
V-SW
M1
INT/EXT
SWITCH
RY3401
RY3403
M10
IC3401
2.5VREG
M10
2.5V
IC3405
S-DSP
M10
IC3406
V-DOLBY
M10
B8V1A
Q402
Q421
M5
Q3710
8V-REG
M2
B8V30mA
IC3205
OP-AMP
M1
B9V200mA
Q403
Q1602
M3/M5
IC2521
V-SW
M1
IC3202
MSP
M1
IC3410
5V-REG
M10
IC3700
PWM
M2
S_VCC
RELAY
SWITCH
RY3402
M10
PVDD(13V)
D5V
A5V
1BIT-AMP UNIT
SIG_VCC
IC3510
+5V-REG
M4
5V30mA
IC3512
3.3VREG
M4
B3.3V
IC3504
ANALOG-SW
M4
IC3513
LOGIC
M4
IC3505
E2PROM
M4
IC3501
MICON
M4
CTL-SW
M11
22 LCD
PANEL
B13V1A
Q2203
Q2200
SIF
M1
B13V1A
IC3702
8V-REG
M2
8V
FAN-MOTOR
B13V1A
IC1610
+5VREG
M3
+5VB
IC1613
2.5VREG
M3
D+2.5V
IC1630
V-SW
M3
IC1604
V-SW
M3
IC1623
SYNC-SEP
M3
FB
FB
A2.5V
D2.5V
Q3715
SW
M2
SIG_VCC
B13V1A
IC1606
3.3VREG
M3
3.3V
IC1602
4Mb FRASH
M3
IC1603
2Mb RAM
M3
IC1601
TEXT CPU
M3
B13V1A
IC802
+5VREG
M5
5V
IC803
3.3VREG
M5
B3.3V
IC401
SYNC-SEP
M5
IC801
VPC
M5
IC2510
P/RDIF
M1
B13V1A
IC4602
3.3VREG
M6
3.3V
IC4604
1.8VREG
M6
1.8V
FB
IC4603
64M-SDRAM
M6
IC4601
SCALER
M6
B13V1A
IC4902
3.3VREG
M9
3.3V-CONT
FB
VCC
IC4516
64M-SDRAM
M7
IC4512
QS-CTL
M7
IC4513
E2PROM
M7
IC4514
MULTIPLEXER
M7
IC4511
MULTIPLIER
M7
SIG_VCC
IC4505
6V-REG
M7
6V
IC4507
34V-REG
M7
Q4502
SLOPE-SW
M7
VGH+34V
VGH+34V
IC4508
-6V-REG
M7
VEE-6V
VEE-6V
IC4504
IC4509
13V-REG
M7
VLS+13V
VLS+13V
IC4702
COM-BIAS
M8
IC4701
GRAY-LEVEL
M8
SIG_VCC
IC4703
3.3V-REG
M8
VSH+3.3VA
VSH+3.3VA
IC4706
DAC
M8
IC4515
M7
INVERTER UNIT
F6551
1.25A
Q6551
Q6552
T6551
F6552
1.25A
Q6554
Q6555
T6552
F6553
1.25A
Q6557
Q6555
T6553
F6554
1.25A
Q6560
Q6561
T6554
BACK LIGHT LAMP

BLOCK DIAGRAM 2/2

SYSYTEM BLOCK DIAGRAM


MAIN UNIT
UHF ANT
DIGITAL TUNER
DTV-SDA DTV-SCL
D-Y
D-R/G/B
SPDIFI
DTV-12V
EU-DIGITAL UNIT
ANT
AV UNIT
SCL5 SDA5
TUNER
2/4
SIF 11
CVBS 13
SCART AV1
OUT-L/R 1/3
IN-L/R 2/4
IN-V1 20
OUT-V1 19
R/G/B,7/11/15
SCART AV2
OUT-L/R 1/3
IN-L/R 2/4
IN-V2 20
OUT-V2 19
AV3
IN-L/R
IN-V3
IN-Y/C
AC-IN
AC-ADAPTOR
DC-IN (13V)
SCL5 SDA5
2/3
MSP
IC3202 (A416WJ)
D-S-L/R 47/48
I2S-DA-3 22
AUDIO METHOD DISTINCTION M1
ANA-IN 67/69
SC1-OUT 36/37
SC2-OUT 33/34
SC1-IN 56/57
SC2-IN 53/54
SC3-IN 50/51
27/28
24/25
4/5
6
7
17
M1
SOUND-L/R
OP-AMP IC3408 (NJM4565) 5/3 7/1 M10
P3401
S-VCC
RELAY RY3402 M10
PVDD
1bit AMP UNIT
1bit Δ-Σ CONV
1bit AMP CIRCUIT
Filter
P3402
INT/EXT SWITCH RY3401 RY3403 M10
EXTERNAL SPEAKER TERMINAL UNIT
SP-JACK UNIT
SP-BOX
INT-SPEAKER
DACA-L/R
H-PHONE IC3203 (BH3543F) 3/5 1/7 M1
HPL/R
HEAD-PHONE
R/C UNIT
I2S-WS I2S-CS
SCL SDA
I2S-OUT
SOUND DSP IC3405 (NJU26150) 25 1 2 3 27 4/16 M10
I2S-IN1
I2S-IN2
I2S-WS I2S-CS
SCL SDA
VIRTUAL DOLBY IC3406 (NJU26106) 25 3 M10
I2S-DA-OUT
S/PDIF ENCODER IC2510 (A385WJ) 13 60 12 53/54/55 M1
SPDIFI
SPDIFO
PHOTO AUDIO OUT
EEPROM IC3407 M10
64M SDRAM IC4603 (A312WJ) M7
64M SDRAM IC4516 (A312WJ) M7
SCL5 SDA5
20/21
VIDEO-SW IC2521 (CXA2040A) M1
D-Y 25
CVBS 23
IN-V1 27
IN-V2 29
IN-V3 31
IN-Y/C 5/7
17 13
11 15 9
Y-OUT
V-PAL
C-OUT
SCL SDA
13/14
VPC IC801 (VPC3230D) M5
72 73 71 1/2/3
31/40 41/50 56/57 70
VIDEO Y0-7 8bit
UV0-7 8bit
HSY/VSY
V-OUT
SCL SDA
45/46
SCALER IC4601 (FLI2310) M6
29-48 21-28 1/2
R 8bit
G 8bit
B 8bit
HS.VS.CLK
QS-LCD CONTROL IC4512 (IXA595) M7
61-67 19/20 27-29 12 13 14
R 8bit *2
G 8bit *2
B 8bit *2
CLK
SC4901 47pin
TFT LCD PANEL
TEXT-R/G/B
V-SW IC3208 (NJM2584) M1
D-R/G/B
R/G/B
R/G/B
V-SW IC1630 (NJM2584) M3
SYNC SEP IC401 (BA7046F) 6 3 M5
CSYNC
HSY/VSY
SCL SDA
OSD-HD/VD
OSD-RGB
TBUS
TEXT-R/G/B
57/58/59 29/30
TELETEXT IC1601 (SDA5550M) 21 38 32 12 M3
TEXT-IN/OUT
RMD1
TXD1
SH-ON
MICRO COMPUTOR IC3501 (A799WJ)
6 25/26 62/64 32/33/34
52/61/73
77 78 79
MP-CS
MP-DA
MP-CK
36 35 11 12 7/72/76 3/4 19 91/92 42 23 M4
GRAY-LEVEL IC4701 (A708WJ) M8
SC4902 1-16pin
SC4901 1/2pin CSCOM
REMOTE CONROL UNIT
4Mb-FRASH IC1602 M3
2Mb-SRAM IC1603 M3
RESET IC3502 M4
EEPROM IC3505 M4
LAMP CHECK GA/GB
DAC IC4706 2 M8
COMMON BIAS IC4702 2 1 M8
DTV-12V TO_DIGITAL_TUNER
Q3713
B9V B5V B6V B13V
F3702 2.5A
F3701 2.5A
SIG-VCC
TO-1bit-AMP
S-VCC
INV-VCC
DC/DC-CONV T3700/Q3715/IC4505
POWER BLOCK DIAGRAM SEE PAGE**
FAN MOTOR
R/C LED H/P UNIT OPC,REMOCON
OPERATION UNIT MAIN-POWER CONTROL KEY
INVERTER UNIT
INVERTER TRANS T6551 T6552 T6553 T6554
LAMP SET (8pcs)
J I H G F E D C B A
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

OVERALL WIRING DIAGRAM


LCD–PANEL
(CLCDTA021DE05)
(RLCDTA021WJZZ)
QCNW–B659WJQZ
TO–LCD PANEL
QCNW–B658WJQZ
TO–LCD PANEL
OPERATION UNIT
(DUNTKC163DE01)
KA
P132
QCNW–B444WJQZ
1BiT–AMP UNIT
(B2SX4052BT)
SA
SB
QCNW–B957WJPZ
UHF ANT
SCN1 SC4902
SCN2 SC4901
KA P3503
QCNW–B962WJQZ
QCNW–B952WJQZ
MD
SC2500
1600
EU-DIGITAL
UNIT
(RUNTKA060WJZZ)
QCNW–B954WJQZ
MF
P3704
QCNW–B953WJQZ
ME
P2502
1503
MAIN UNIT
(DUNTKC166DE01)
QCNW–B657WJQZ
TO–LCD PANEL
GD
SC4501
S
J1104
V
L
R
J1101
AV3
AV UNIT
(DUNTKC160DE01)
TP2
P4502
TP1
P3504
SC1102
AV2
(SCART2)
TP3
P3201
SC1101
AV1
(SCART1)
VC
SC1104
QCNW–B888WJQZ
VB
SC1103
QCNW–B887WJQZ
VB
SC2503
VC
SC2504
VA
SC1105
DC–FAN–MOTOR
(NFANR0126CEZZ)
VA
SC2501
QCNW–B886WJQZ
DIGITAL TUNER
IN
OUT
RS–232C
CI
MG
SA
P3401
QCNW–B958WJQZ
SB
P3402
INVERTER UNIT
(DUNTKB973DE04)
LA
P6551
LB
P6552
LC
P6553
LD
P6554
TO–LAMP
LAMP SET
(KLMP–A022WJZZ)
(KLMP–A023WJZZ)
QCNW–B961WJQZ
PF
P6555
PF
P3702
SC
P3403
LAMP SET
GA
P3700
GB
P3701
TO–LAMP
MA
P2501
QCNW–B955WJQZ
MF
P3705
MA P1104
MG
TU1101
TUNER
(VTUVT4T5FD532)
MB
P3703
IC1101
AUDIO OUT
(DIGITAL)
MB P701
SD
P3404
RA P3501
QCNW–B741WJZZ
QCNW–B960WJQZ
QCNW–B959WJQZ
J701
DC–IN
QCNW–B956WJQZ
ANT
QCNW–B445WJQZ
R/C.LED.H/P UNIT
(DUNTKC162DE01)
RA
P101
H/P JACK
EXT.SP.TERMINAL UNIT
(DUNTKC164DE01)
SD
P202
R
L
SP–JACK UNIT
(DUNTKC165DE01)
SC
P201
REMOTO–CONTROL
(RRMCGA206WJSA)
AC–ADAPTOR
(UADP–A056WJPZ)
AC CORD
QACCKA007WJPZ
SP–BOX
(RSP–ZA037WJN2)
J
I
H
G
F
E
D
C
B
A
1
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20

DESCRIPTION OF SCHEMATIC DIAGRAM

VOLTAGE MEASUREMENT CONDITION:

1. The voltages at test points are measured on exclusive AC adaptor and the stable supply voltage of AC 120V. Signals are fed by a color bar signal generator for servicing purpose and the above voltages are measured with a 20k ohm/V tester.

INDICATION OF RESISTOR & CAPACITOR:

RESISTOR

1. The unit of resistance "Ω" is omitted.
   (K=kΩ=1000 Ω, M=MΩ).
2. All resistors are ± 5%, unless otherwise noted.
   (J= ± 5%, F= ± 1%, D= ± 0.5%)
3. All resistors are 1/16W, unless otherwise noted.
4. All resistors are Carbon type, unless otherwise noted.
   Ⓒ: Solid   Ⓦ: Cement
   Ⓢ: Oxide Film   Ⓣ: Special
   Ⓝ: Metal Coating

CAPACITOR

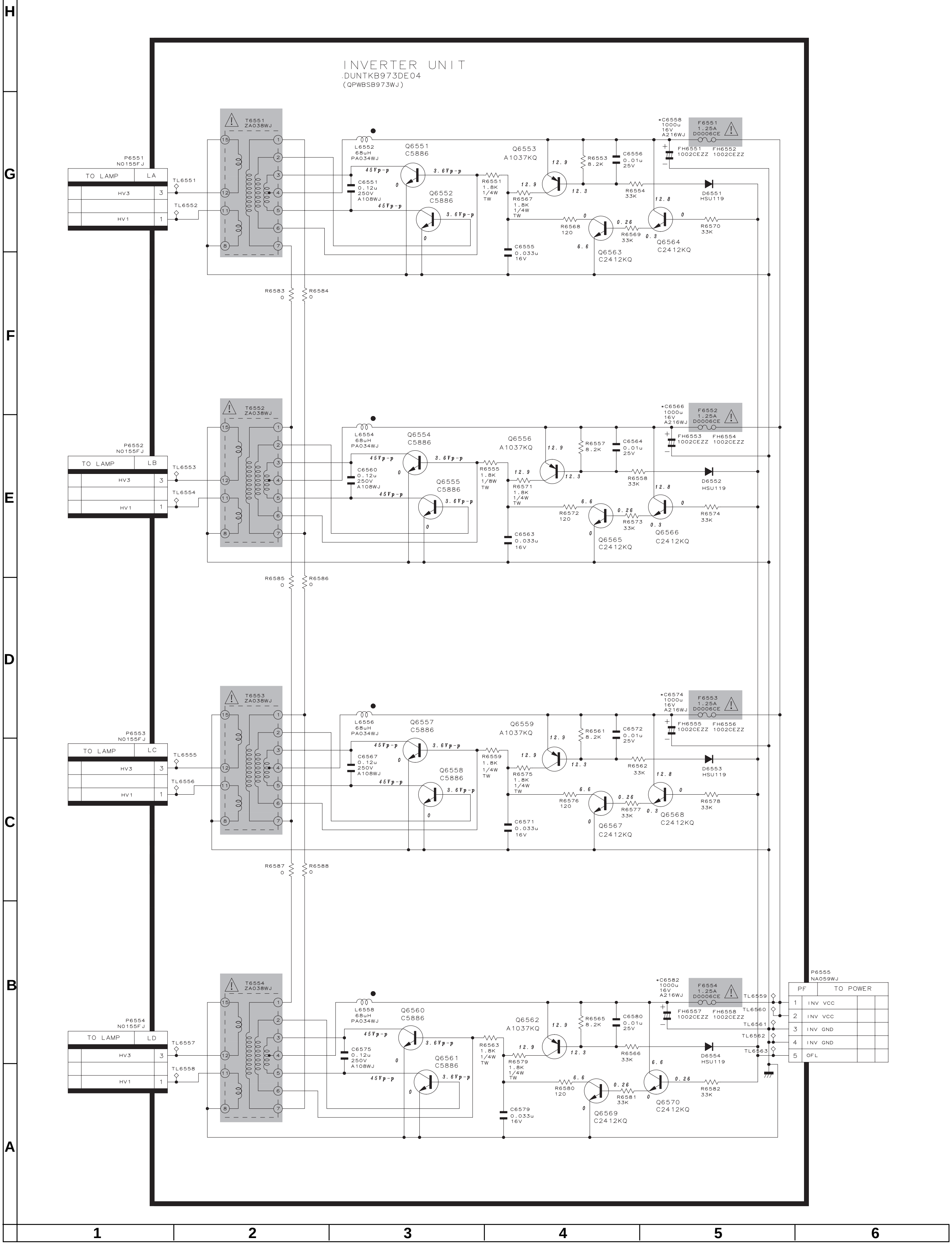
1. All capacitors are µF, unless otherwise noted.
   (P=pF=µµF).
2. All capacitors are 50V, unless otherwise noted.
3. All capacitors are Ceramic type, unless otherwise noted.
   (ML): Mylar   (TA): Tantalum
   (PF): Polypro Film   (ST): Styrol

CAUTION:
This circuit diagram is original one, therefore there may be a slight difference from yours.

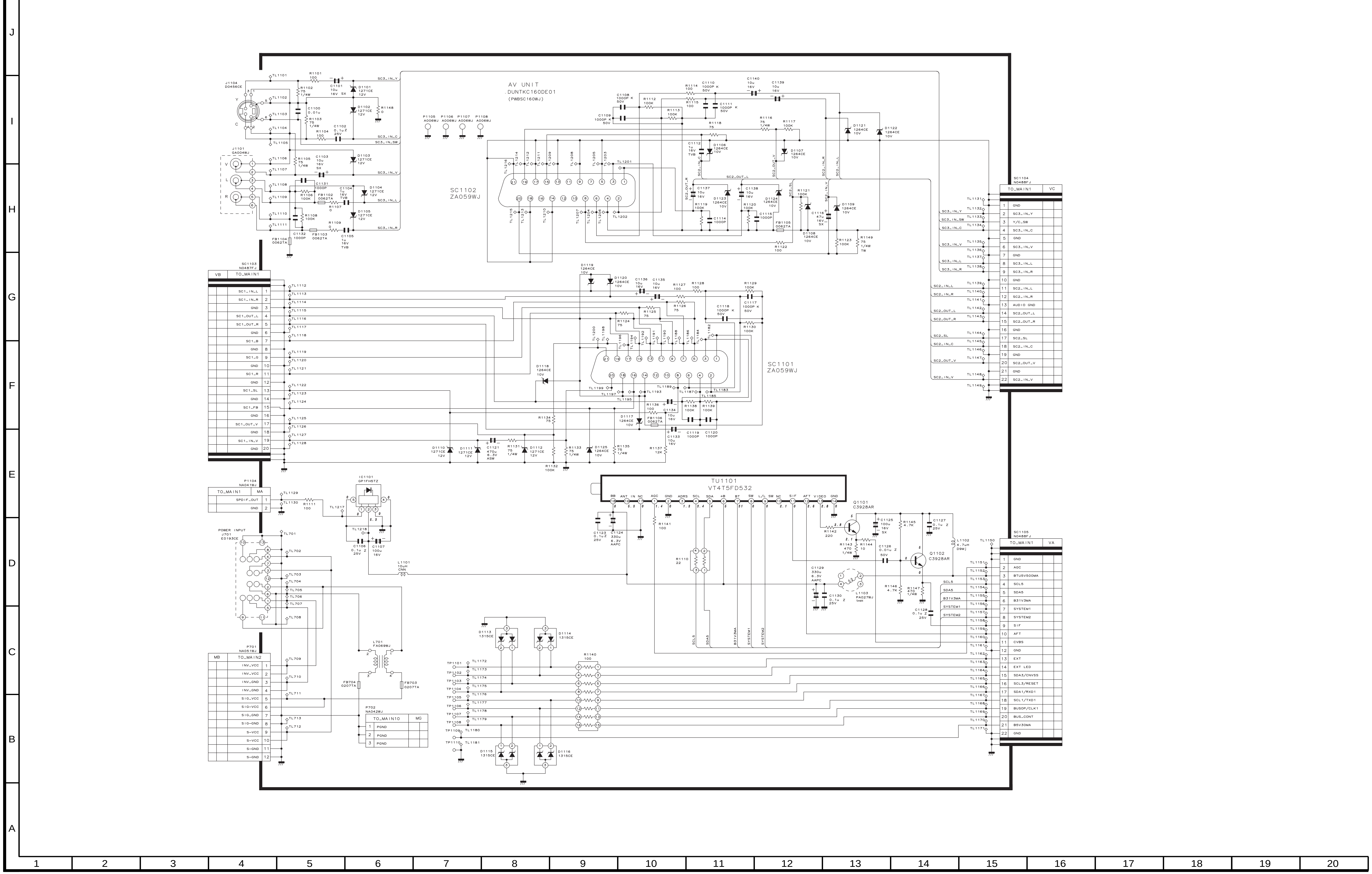
IMPORTANT SAFETY NOTICE:
PARTS MARKED WITH "⚠" (▨) ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

SCHEMATIC DIAGRAM

■ INVERTER Unit


H
G
F
E
D
C
B
A
1
2
3
4
5
6
INVERTER UNIT
.DUNTKB973DE04
(QPWBSB973WJ)
P6551
N0155FJ
TO LAMP
LA
HV3
3
HV1
1
TL6551
TL6552
T6551
ZA038WJ
L6552
68uH
PA034WJ
Q6551
C5886
C6551
0.12u
250V
A108WJ
Q6552
C5886
45Vp-p
3.6Vp-p
R6551
1.8K
1/4W
TW
R6567
1.8K
1/4W
TW
Q6553
A1037KQ
12.9
12.3
12.8
R6553
8.2K
C6556
0.01u
25V
R6554
33K
*C6558
1000u
16V
A216WJ
F6551
1.25A
D0006CE
FH6551
1002CEZZ
FH6552
1002CEZZ
D6551
HSU119
R6568
120
R6569
33K
R6570
33K
0.26
0.3
6.6
0
Q6563
C2412KQ
Q6564
C2412KQ
C6555
0.033u
16V
R6583
0
R6584
0
P6552
N0155FJ
TO LAMP
LB
TL6553
TL6554
T6552
ZA038WJ
L6554
68uH
PA034WJ
Q6554
C5886
C6560
0.12u
250V
A108WJ
Q6555
C5886
R6555
1.8K
1/8W
TW
R6571
1.8K
1/4W
TW
Q6556
A1037KQ
R6557
8.2K
C6564
0.01u
25V
R6558
33K
*C6566
1000u
16V
A216WJ
F6552
1.25A
D0006CE
FH6553
1002CEZZ
FH6554
1002CEZZ
D6552
HSU119
R6572
120
R6573
33K
R6574
33K
Q6565
C2412KQ
Q6566
C2412KQ
C6563
0.033u
16V
R6585
0
R6586
0
P6553
N0155FJ
TO LAMP
LC
TL6555
TL6556
T6553
ZA038WJ
L6556
68uH
PA034WJ
Q6557
C5886
C6567
0.12u
250V
A108WJ
Q6558
C5886
R6559
1.8K
1/4W
TW
R6575
1.8K
1/4W
TW
Q6559
A1037KQ
R6561
8.2K
C6572
0.01u
25V
R6562
33K
*C6574
1000u
16V
A216WJ
F6553
1.25A
D0006CE
FH6555
1002CEZZ
FH6556
1002CEZZ
D6553
HSU119
R6576
120
R6577
33K
R6578
33K
Q6567
C2412KQ
Q6568
C2412KQ
C6571
0.033u
16V
R6587
0
R6588
0
P6554
N0155FJ
TO LAMP
LD
TL6557
TL6558
T6554
ZA038WJ
L6558
68uH
PA034WJ
Q6560
C5886
C6575
0.12u
250V
A108WJ
Q6561
C5886
R6563
1.8K
1/4W
TW
R6579
1.8K
1/4W
TW
Q6562
A1037KQ
R6565
8.2K
C6580
0.01u
25V
R6566
33K
*C6582
1000u
16V
A216WJ
F6554
1.25A
D0006CE
FH6557
1002CEZZ
FH6558
1002CEZZ
D6554
HSU119
R6580
120
R6581
33K
R6582
33K
Q6569
C2412KQ
Q6570
C2412KQ
C6579
0.033u
16V
TL6559
TL6560
TL6561
TL6562
TL6563
P6555
NA059WJ
PF
TO POWER
1 INV VCC
2 INV VCC
3 INV GND
4 INV GND
5 OFL

■ AV Unit


J
I
H
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F
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14
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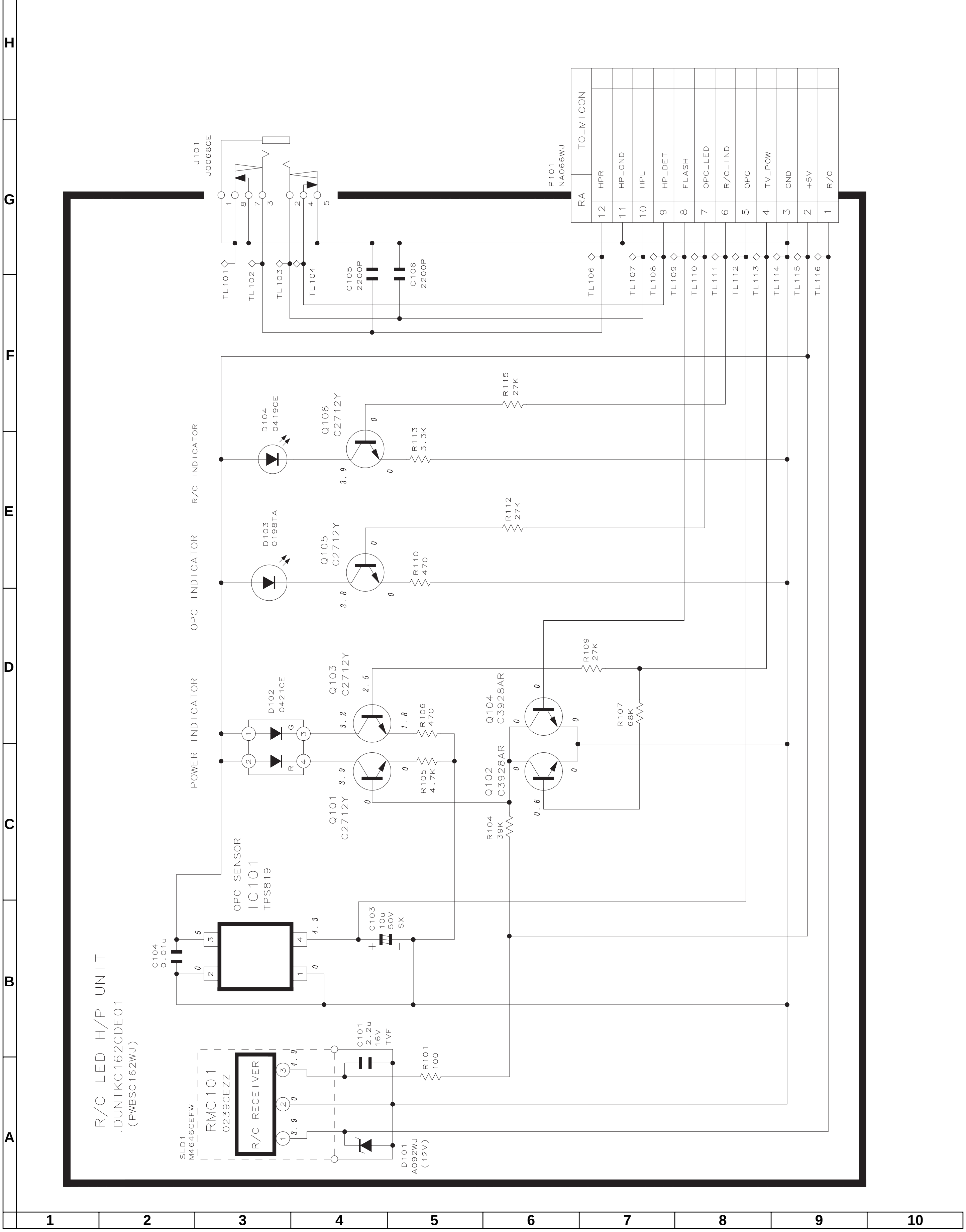
17
18
19
20
AV UNIT
DUNTKC160DE01
(PWBSC160WJ)
J1104
D0456CE
J1101
GA004WJ
SC1102
ZA059WJ
SC1101
ZA059WJ
SC1103
N0487FJ
VB
TO_MAIN1
SC1_IN_L
SC1_IN_R
GND
SC1_OUT_L
SC1_OUT_R
SC1_B
SC1_G
SC1_R
SC1_SL
SC1_FB
SC1_OUT_V
SC1_IN_V
SC1104
N0488FJ
VC
SC3_IN_Y
Y/C_SW
SC3_IN_C
SC3_IN_V
SC3_IN_L
SC3_IN_R
SC2_IN_L
SC2_IN_R
AUDIO GND
SC2_OUT_L
SC2_OUT_R
SC2_SL
SC2_IN_C
SC2_OUT_V
SC2_IN_V
P1104
NA041WJ
MA
SPDIF_OUT
IC1101
GP1FH5TZ
POWER INPUT
J701
E0193CE
P701
NA051WJ
MB
TO_MAIN2
INV_VCC
INV_GND
SIG_VCC
SIG_GND
S-VCC
S-GND
L701
FA069WJ
P702
NA042WJ
TO_MAIN10
MG
PGND
TU1101
VT4T5FD532
BB
ANT
IN
NC
AGC
ADRS
SCL
SDA
+B
BT
SW
L/L
SIF
AFT
VIDEO
Q1101
C3928AR
Q1102
C3928AR
L1103
PA027WJ
R1140
100
SC1105
N0488FJ
VA
BTU5V500MA
SCL5
SDA5
B31V3MA
SYSTEM1
SYSTEM2
CVBS
EXT
EXT LED
SDA3/CNVSS
SCL3/RESET
SDA1/RXD1
SCL1/TXD1
BUSOP/CLK1
BUS_CONT
B5V30MA
D1113
D1114
D1115
D1116
1315CE

R/C,LED Unit


H
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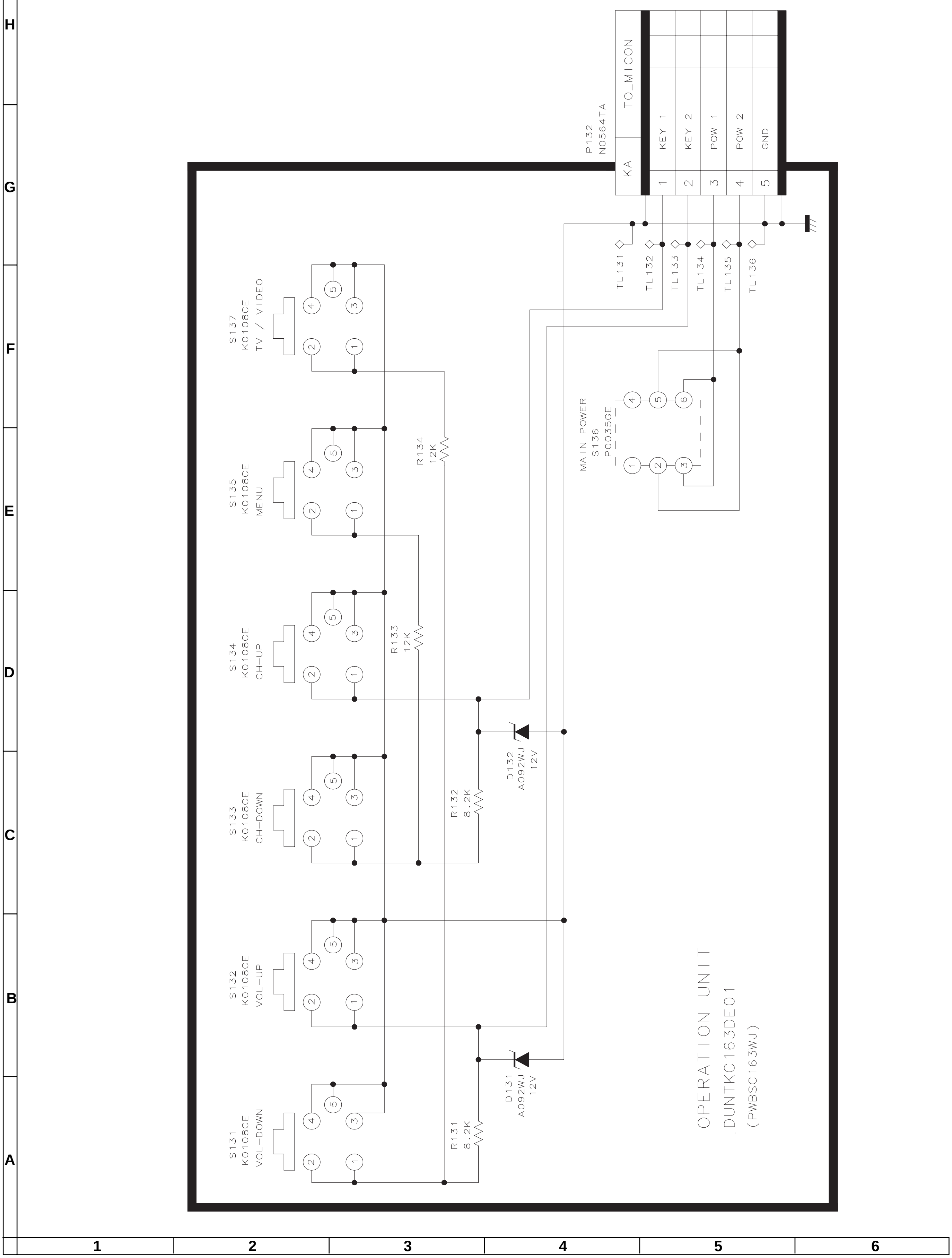
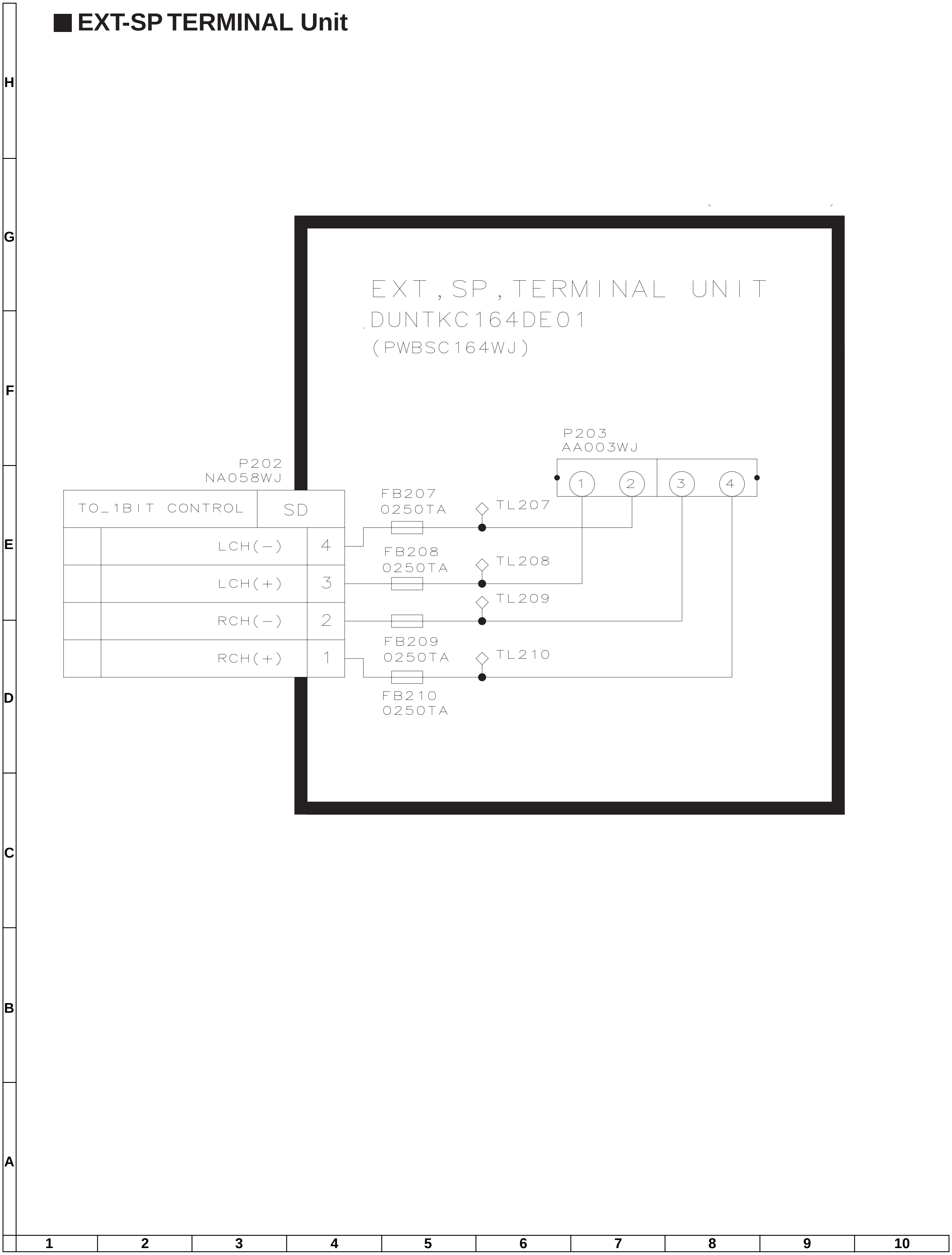
3
4
5
6
7
8
9
10
J101
J0068CE
P101
NA066WJ
TO_MICON
RA
12 HPR
11 HP_GND
10 HPL
9 HP_DET
8 FLASH
7 OPC_LED
6 R/C_IND
5 OPC
4 TV_POW
3 GND
2 +5V
1 R/C
TL101
TL102
TL103
TL104
C105 2200P
C106 2200P
TL106
TL107
TL108
TL109
TL110
TL111
TL112
TL113
TL114
TL115
TL116
R/C INDICATOR
D104 0419CE
Q106 C2712Y
R115 27K
R113 3.3K
OPC INDICATOR
D103 0198TA
Q105 C2712Y
R112 27K
R110 470
POWER INDICATOR
D102 0421CE
G
R
Q103 C2712Y
R106 470
Q101 C2712Y
R105 4.7K
Q104 C3928AR
Q102 C3928AR
R109 27K
R107 68K
R104 39K
OPC SENSOR
IC101
TPS819
C104 0.01u
C103 10u 50V SX
R/C LED H/P UNIT
DUNTKC162CDE01
(PWBSC162WJ)
SLD1
M4646CEFW
RMC101
0239CEZZ
R/C RECEIVER
C101 2.2u 16V TVF
R101 100
D101
A092WJ
(12V)
3.9
3.8
3.2
2.5
1.8
0.6
4.3
4.9

■ OPERATION Unit

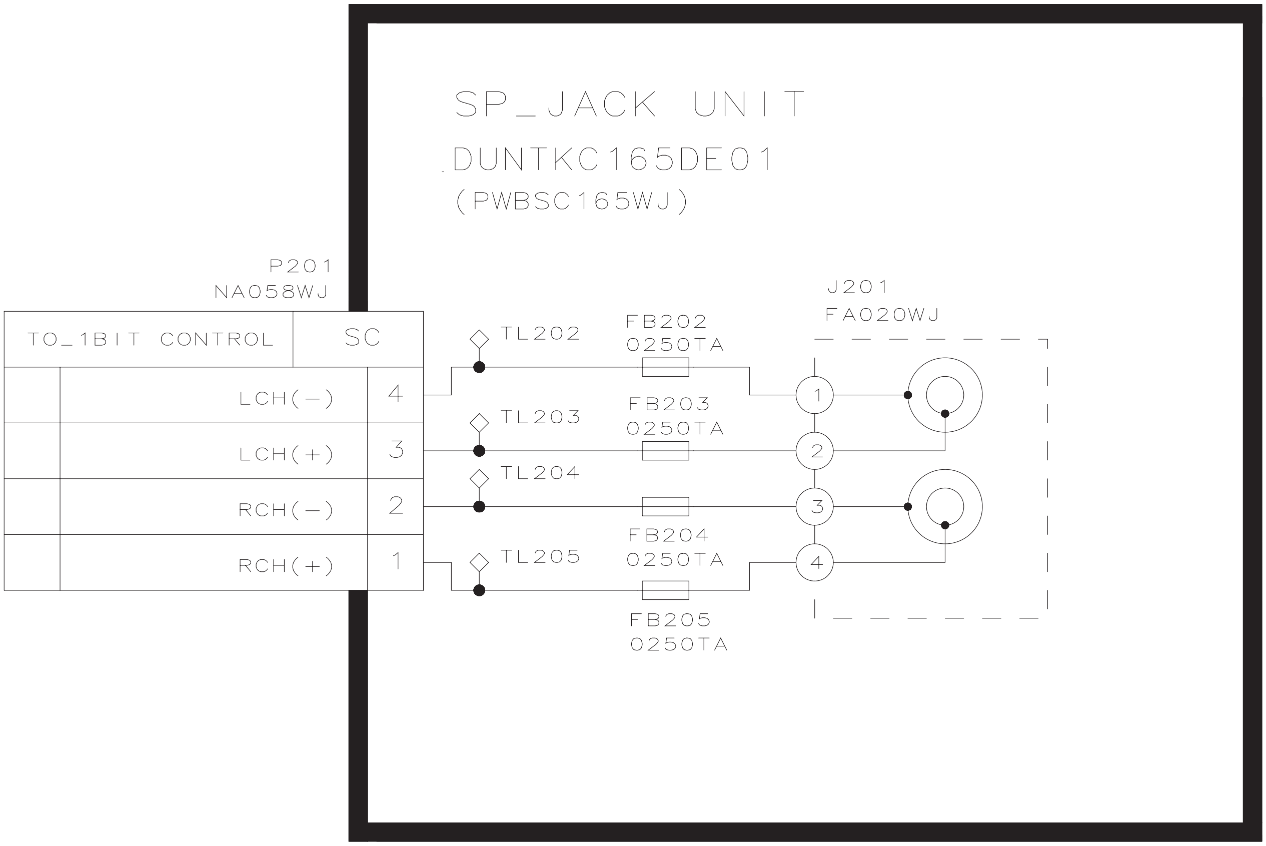

H
G
F
E
D
C
B
A
1
2
3
4
5
6
P132
N0564TA
KA
TO_MICON
1 KEY 1
2 KEY 2
3 POW 1
4 POW 2
5 GND
TL131
TL132
TL133
TL134
TL135
TL136
S137
K0108CE
TV / VIDEO
S135
K0108CE
MENU
S134
K0108CE
CH–UP
S133
K0108CE
CH–DOWN
S132
K0108CE
VOL–UP
S131
K0108CE
VOL–DOWN
R134
12K
R133
12K
R132
8.2K
R131
8.2K
D132
A092WJ
12V
D131
A092WJ
12V
MAIN POWER
S136
P0035GE
OPERATION UNIT
DUNTKC163DE01
(PWBSC163WJ)

■ EXT-SP TERMINAL Unit

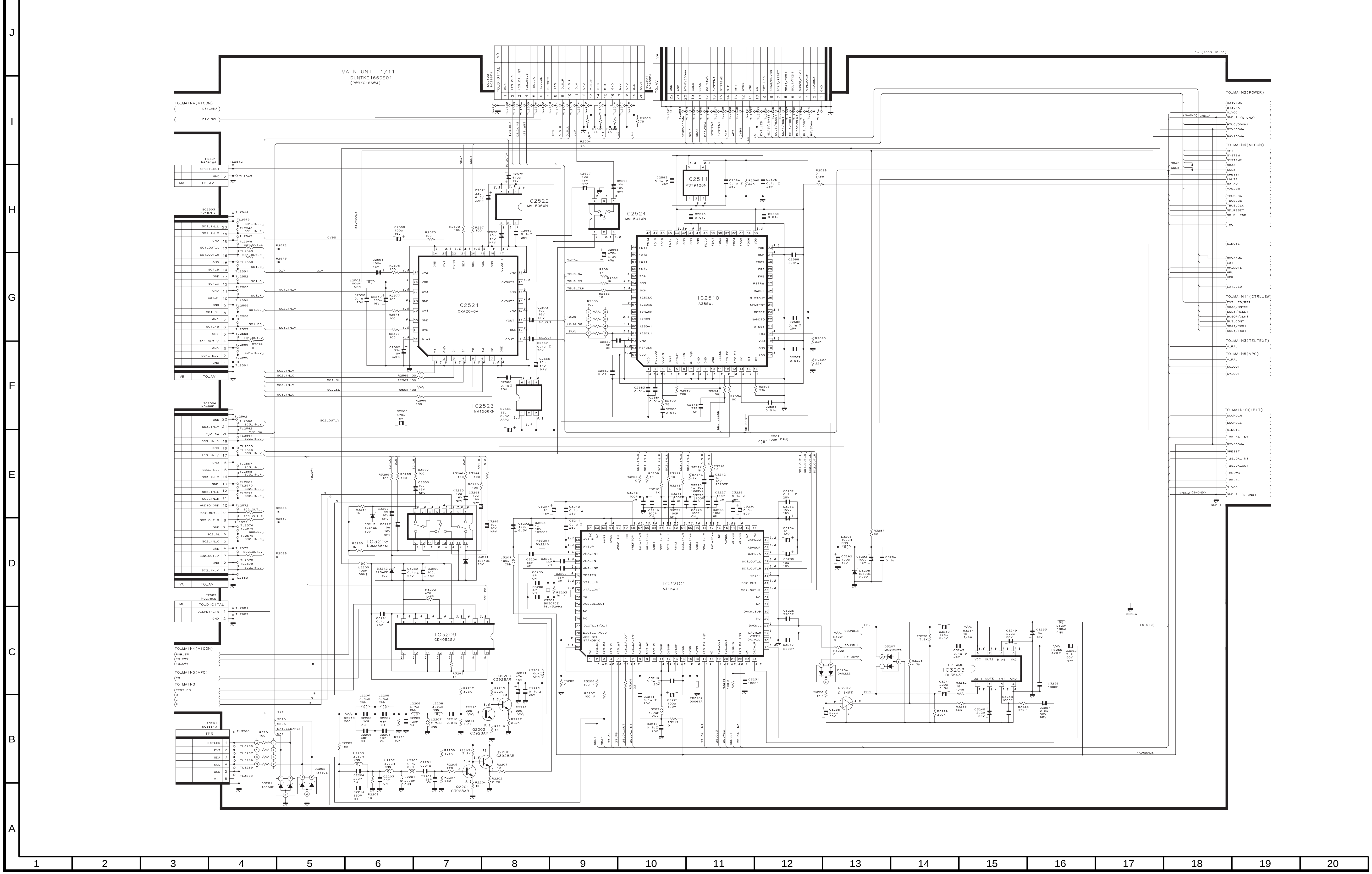

H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
EXT,SP,TERMINAL UNIT
DUNTKC164DE01
(PWBSC164WJ)
P203
AA003WJ
1
2
3
4
P202
NA058WJ
TO_1BIT CONTROL
SD
LCH(−) 4
LCH(+) 3
RCH(−) 2
RCH(+) 1
FB207
0250TA
TL207
FB208
0250TA
TL208
TL209
FB209
0250TA
TL210
FB210
0250TA

■ SP-JACK Unit

H
G
F
E
D
C
B
A
1
2
3
4
5
6


SP_JACK UNIT
DUNTKC165DE01
(PWBSC165WJ)
P201
NA058WJ
TO_1BIT CONTROL
SC
LCH(−) 4
LCH(+) 3
RCH(−) 2
RCH(+) 1
TL202
TL203
TL204
TL205
FB202 0250TA
FB203 0250TA
FB204 0250TA
FB205 0250TA
J201
FA020WJ
1
2
3
4

■ MAIN Unit - AUDIO 1/11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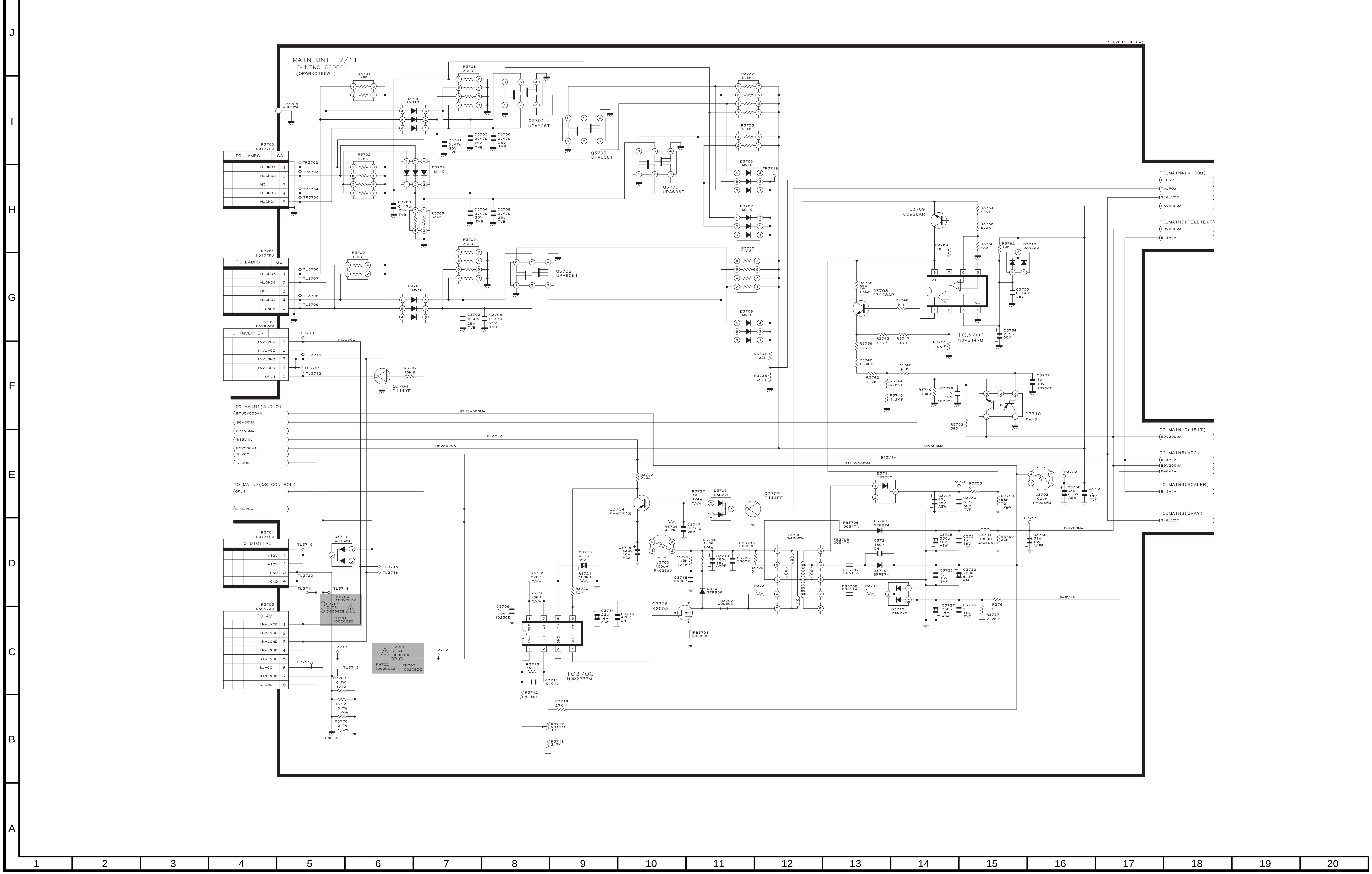
MAIN UNIT 1/11
DUNTKC166DE01
(PWBXC166WJ)
1st(2003.10.31)
SC2500
TO_DIGITAL
SC2507
TO_AV
MD
VA
TO_MAIN4(MICON)
DTV_SDA
DTV_SCL
P2501
SPDIF_OUT
GND
MA
TO_AV
SC2503
SC1_IN_L
SC1_IN_R
SC1_OUT_L
SC1_OUT_R
SC1_B
SC1_G
SC1_R
SC1_SL
SC1_FB
SC1_OUT_V
SC1_IN_V
VB
TO_AV
SC2504
SC3_IN_L
SC3_IN_R
Y/C_SW
SC3_IN_C
SC3_IN_Y
SC2_IN_L
SC2_IN_R
AUDIO GND
SC2_OUT_L
SC2_OUT_R
SC2_SL
SC2_IN_C
SC2_OUT_V
SC2_IN_V
VC
TO_AV
P2502
ME
TO_DIGITAL
D_SPDIF_IN
TO_MAIN4(MICON)
RGB_SW1
FB_SW2
FB_SW1
TO_MAIN5(VPC)
TO MAIN3
TEXT_FB
P3201
TP3
EXTLED
EXT
SDA
SCL
GND
VI
IC2521
CXA2040A
IC2522
MM1506XN
IC2523
MM1506XN
IC2524
MM1501XN
IC2511
PST9128N
IC2510
A385WJ
IC3208
NJM2584M
IC3209
CD4052SJ
IC3202
A416WJ
IC3203
BH3543F
HP_AMP
Q2200
C3928AR
Q2201
C3928AR
Q2202
C3928AR
Q2203
C3928AR
Q3202
C114EE
D3204
DAN222
D3207
MA3120WA
X3201
18.432MHz
TO_MAIN2(POWER)
TO_MAIN4(MICON)
TO_MAIN11(CTRL_SW)
TO_MAIN3(TELTEXT)
TO_MAIN5(VPC)
TO_MAIN10(1BIT)
SOUND_R
SOUND_L
S_MUTE
I2S_DA_IN2
BSV5OOMA
SRESET
I2S_DA_IN1
I2S_DA_OUT
I2S_WS
I2S_CL
S_VCC
GND_A
(S-GND)
V_PAL
SC_OUT
SY_OUT
EXT_LED
HPL
HPR

■ MAIN Unit - POWER 2/11


MAIN UNIT 2/11
DUNTKC166DE01
(QPWBXC166WJ)
1J(2003.06.04)
P3700
TO LAMPG
H_GND1
H_GND2
NC
H_GND3
H_GND4
P3701
TO LAMPG
H_GND5
H_GND6
NC
H_GND7
H_GND8
P3702
TO INVERTER
INV_VCC
INV_GND
OFL1
TO_MAIN1(AUDIO)
BTU5V500MA
B8V30MA
B31V3MA
B13V1A
B5V500MA
S_VCC
S_GND
TO_MAIN7(QS_CONTROL)
OFL1
SIG_VCC
P3704
TO DIGITAL
+12V
GND
P3703
TO AV
INV_VCC
INV_GND
SIG_VCC
S_VCC
SIG_GND
S_GND
GND_A
Q3700
C114YE
Q3701
UPA606T
Q3702
UPA606T
Q3703
UPA606T
Q3705
UPA606T
Q3704
FMMT718
Q3706
K2503
Q3707
C144EE
Q3708
C3928AR
Q3709
C3928AR
Q3710
FMY3
IC3700
NJM2377M
IC3701
NJM2147M
T3700
WA006WJ
L3700
100uH
PA026WJ
L3701
100uH
CA060WJ
L3703
100uH
PA026WJ
F3701
2.5A
D0009CE
F3702
2.5A
D0009CE
FH700
1002CEZZ
FH701
1002CEZZ
FH702
1002CEZZ
FH703
1002CEZZ
TO_MAIN4(MICOM)
L_ERR
TV_POW
SIG_VCC
B5V500MA
TO_MAIN3(TELETEXT)
B9V200MA
B13V1A
TO_MAIN10(1BIT)
B9V200MA
TO_MAIN5(VPC)
B13V1A
B9V200MA
B-8V1A
TO_MAIN6(SCALER)
B13V1A
TO_MAIN8(GRAY)
SIG_VCC
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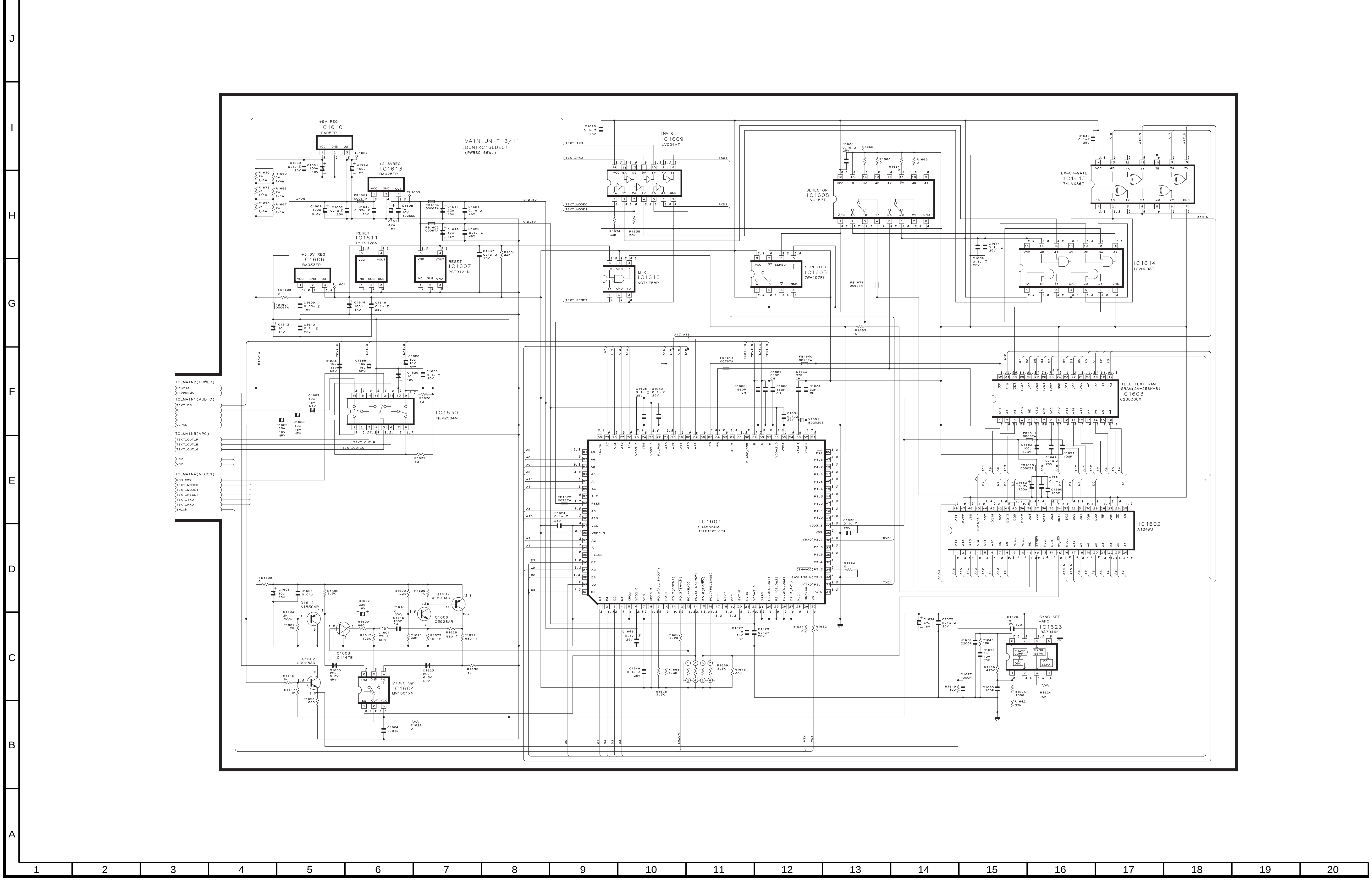
■ MAIN Unit - TELETEXT 3/11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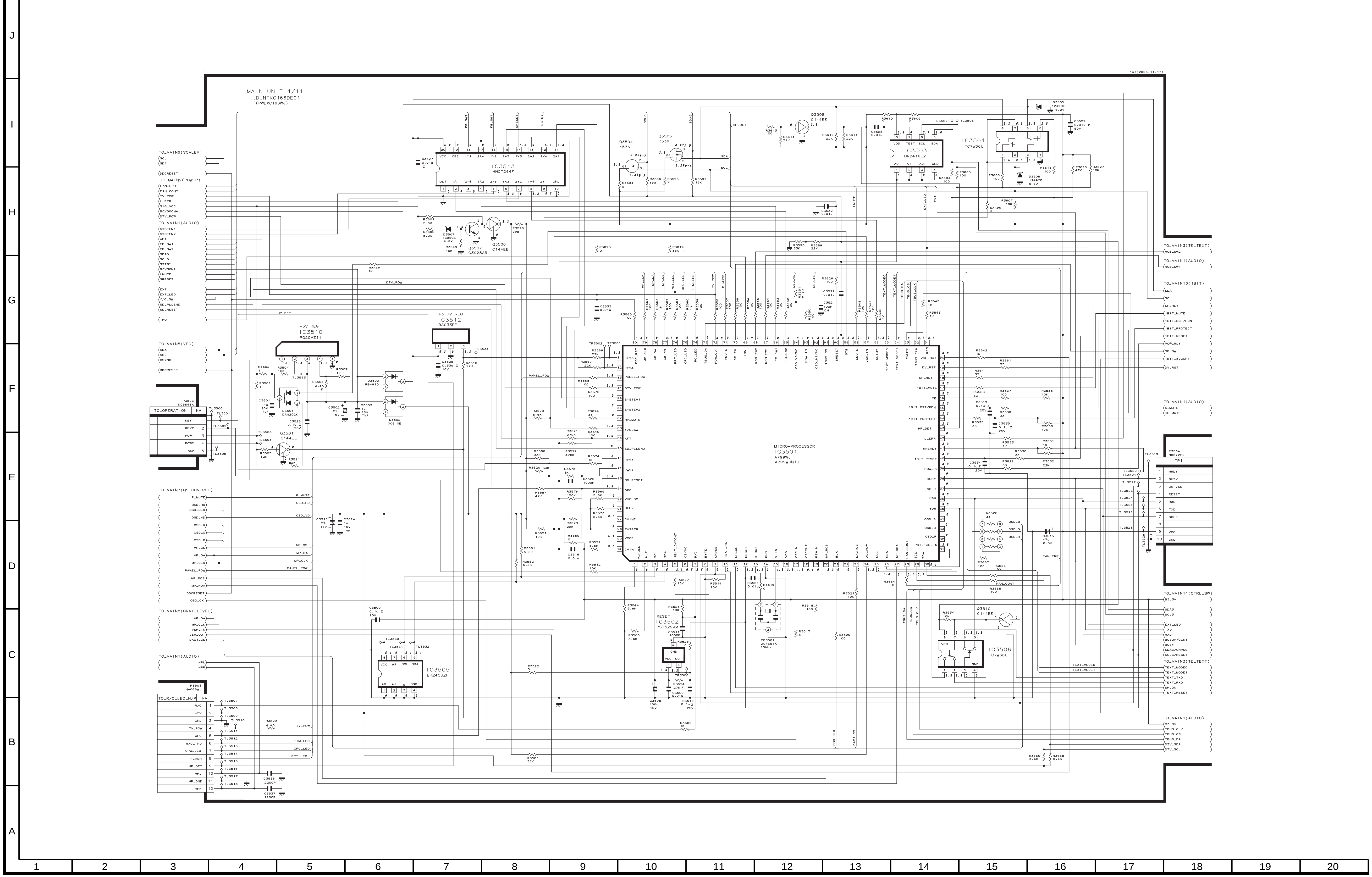
MAIN UNIT 3/11
DUNTKC166DE01
(PWBSC166WJ)
+5V REG
IC1610
BA05FP
+2.5VREG
IC1613
BA025FP
+3.3V REG
IC1606
BA033FP
RESET
IC1611
PST9128N
RESET
IC1607
PST9121N
INV 6
IC1609
LVC04AT
MIX
IC1616
NC7S258P
SERECTOR
IC1608
LVC157T
SERECTOR
IC1605
78H157FK
EX-OR-GATE
IC1615
74LVX86T
IC1614
TCVHC08T
TELE TEXT RAM
SRAM(2M=256K×8)
IC1603
62S8308X
IC1602
A134WJ
IC1601
SDA5550M
TELETEXT CPU
IC1630
NJM2584M
VIDEO SW
IC1604
MM1501XN
SYNC SEP
+AFC
IC1623
BA7046F
Q1612
A1530AR
Q1607
A1530AR
Q1606
C3928AR
Q1608
C144TE
Q1602
C3928AR
X1601
B02020E
TO_MAIN2(POWER)
B13V1A
B9V200MA
TO_MAIN1(AUDIO)
TEXT_FB
R
G
B
V_PAL
TO_MAIN5(VPC)
TEXT_OUT_R
TEXT_OUT_B
TEXT_OUT_G
HSY
VSY
TO_MAIN4(MICON)
RGB_SW2
TEXT_MODE0
TEXT_MODE1
TEXT_RESET
TEXT_TXD
TEXT_RXD
SH_ON

■ MAIN Unit - MICON 4/11


MAIN UNIT 4/11
DUNTKC166DE01
(PWBXC166WJ)
MICRO-PROCESSOR
IC3501
A799WJ
A799WJN1Q
IC3513
HHCT244F
IC3510
PQ20VZ11
+5V REG
IC3512
BA033FP
+3.3V REG
IC3503
BR24I6E2
IC3504
TC7W66U
IC3505
BR24C32F
IC3506
TC7W66U
IC3502
PST529JM
RESET
CF3501
ZO169TA
10MHz
Q3504
K536
Q3505
K536
Q3508
C144EE
Q3501
C144EE
Q3506
C144EE
Q3507
C3928AR
Q3510
C144EE
D3501
DAN202K
D3502
DO61OE
D3503
RB491D
D3505
1249CE
6.2V
D3506
1249CE
6.2V
D3507
1396CE
6.8V
TO_MAIN6(SCALER)
TO_MAIN2(POWER)
TO_MAIN1(AUDIO)
TO_MAIN5(VPC)
TO_OPERATION
P3503
NO5K4TA
TO_MAIN7(QS_CONTROL)
TO_MAIN8(GRAY_LEVEL)
P3501
NA066WJ
TO_R/C_LED_H/P
TO_MAIN3(TELTEXT)
TO_MAIN10(1BIT)
P3504
NO57JFJ
TO_MAIN11(CTRL_SW)
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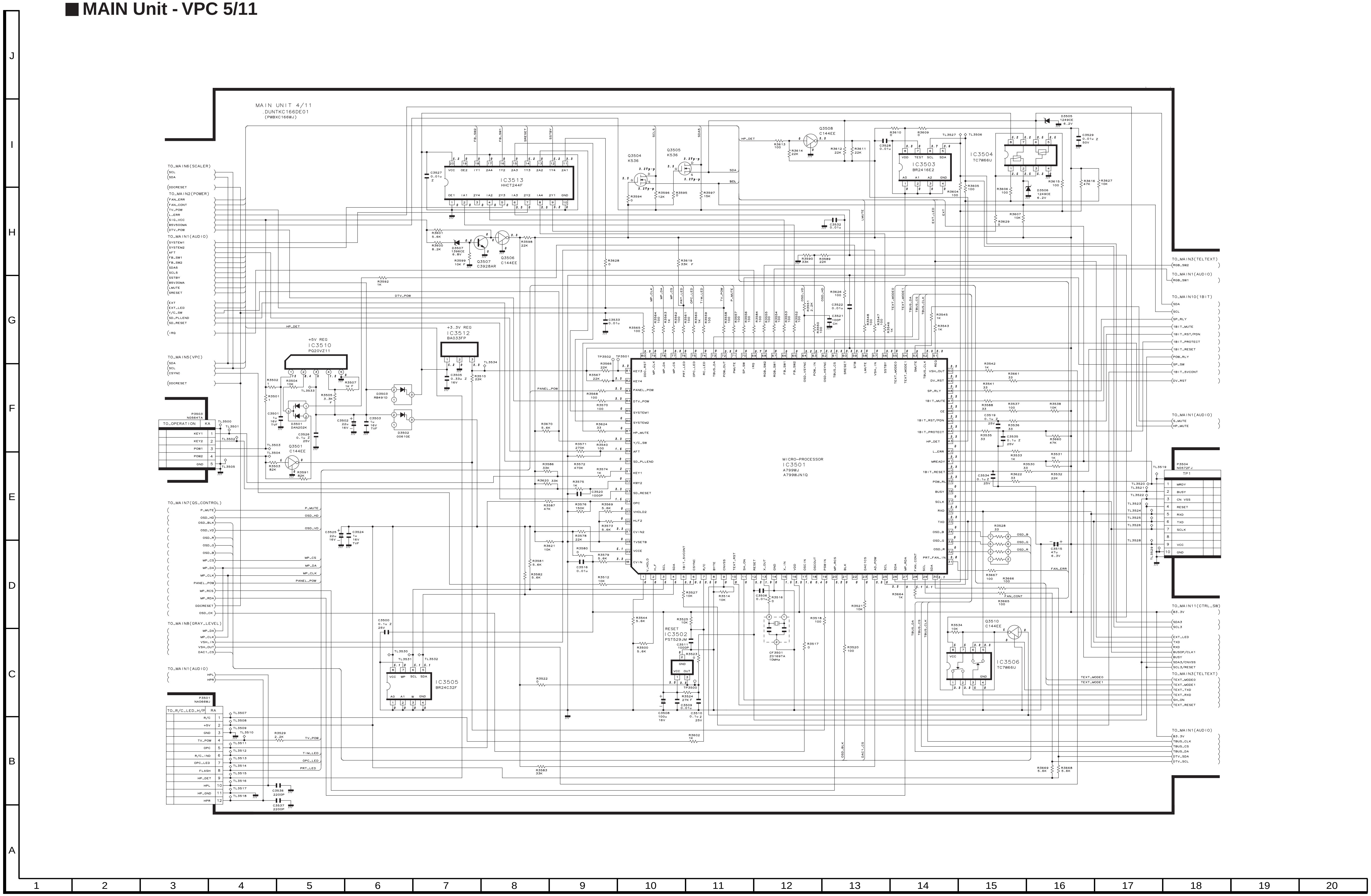
■ MAIN Unit - VPC 5/11


MAIN UNIT 4/11
DUNTKC166DE01
(PWBXC166WJ)
TO_MAIN6(SCALER)
TO_MAIN2(POWER)
TO_MAIN1(AUDIO)
TO_MAIN5(VPC)
TO_OPERATION
P3503 N0564TA
TO_MAIN7(QS_CONTROL)
TO_MAIN8(GRAY_LEVEL)
TO_R/C_LED_H/P
P3501 NA066WJ
IC3513 HHCT244F
IC3510 PQ20VZ11
+5V REG
IC3512 BA033FP
+3.3V REG
IC3501 A799WJ A799WJ1Q
MICRO-PROCESSOR
IC3502 PST529JM
RESET
IC3503 BR24I6E2
IC3504 TC7W66U
IC3505 BR24C32F
IC3506 TC7W66U
Q3504 K536
Q3505 K536
Q3506 C144EE
Q3507 C3928AR
Q3508 C144EE
Q3501 C144EE
Q3510 C144EE
D3501 DAN202K
D3502 DG61GE
D3503 RB491D
D3505 1249CE 6.2V
D3506 1249CE 6.2V
D3507 1396CE 6.8V
CF3501 ZO169TA 10MHz
P3504 N0572FJ
TP1
TO_MAIN3(TELTEXT)
TO_MAIN1(AUDIO)
TO_MAIN10(1BIT)
TO_MAIN11(CTRL_SW)
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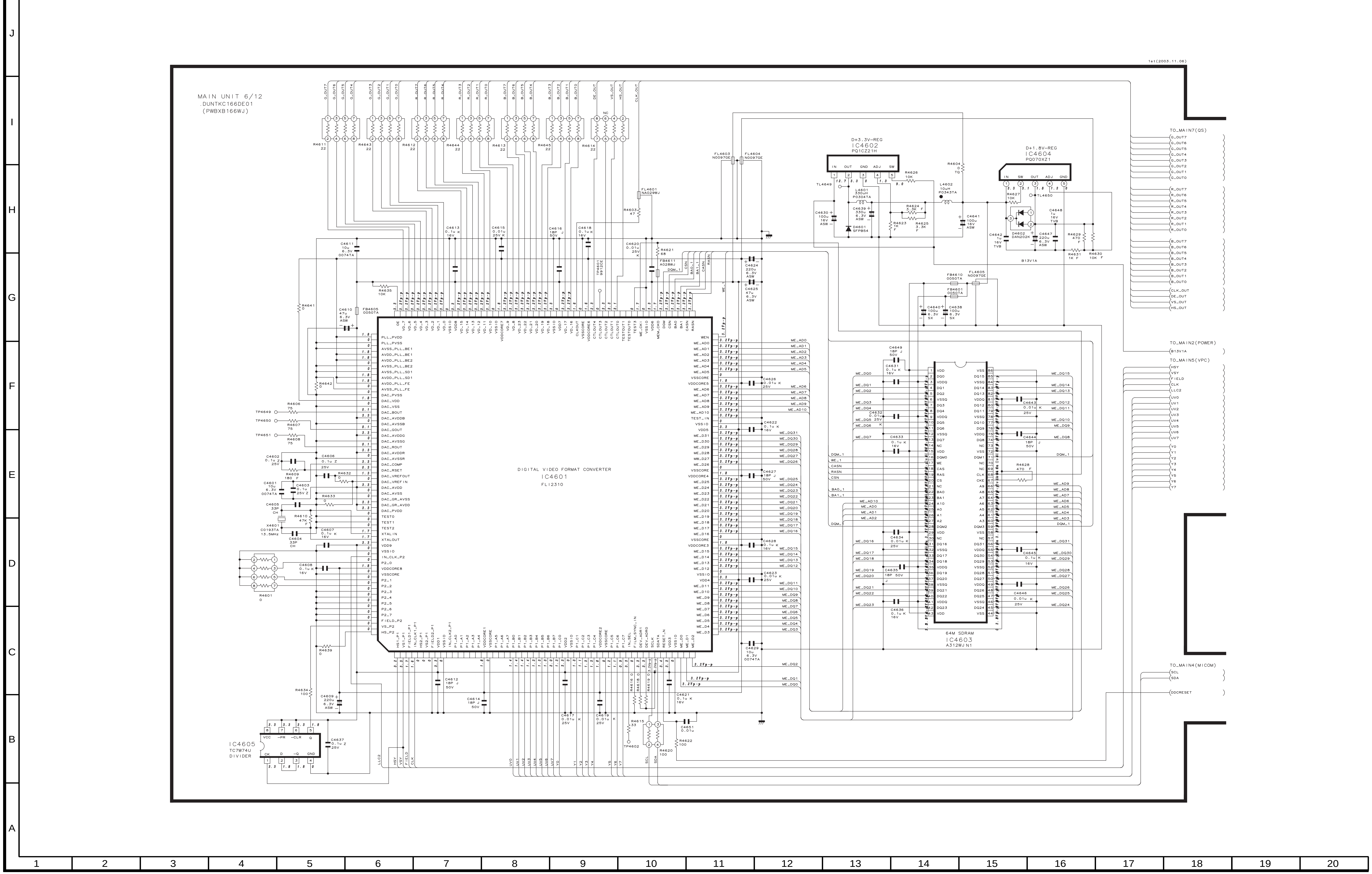
■ MAIN Unit - SCALER 6/11


1st(2003.11.06)
MAIN UNIT 6/12
DUNTKC166DE01
(PWBXB166WJ)
DIGITAL VIDEO FORMAT CONVERTER
IC4601
FLI2310
D+3.3V-REG
IC4602
PQ1CZ21H
D+1.8V-REG
IC4604
PQ070XZ1
64M SDRAM
IC4603
A312WJ N1
IC4605
TC7W74U
DIVIDER
X4601
C0193TA
13.5MHz
TO_MAIN7(QS)
TO_MAIN2(POWER)
TO_MAIN5(VPC)
TO_MAIN4(MICOM)
B13V1A
SCL
SDA
DDCRESET
J
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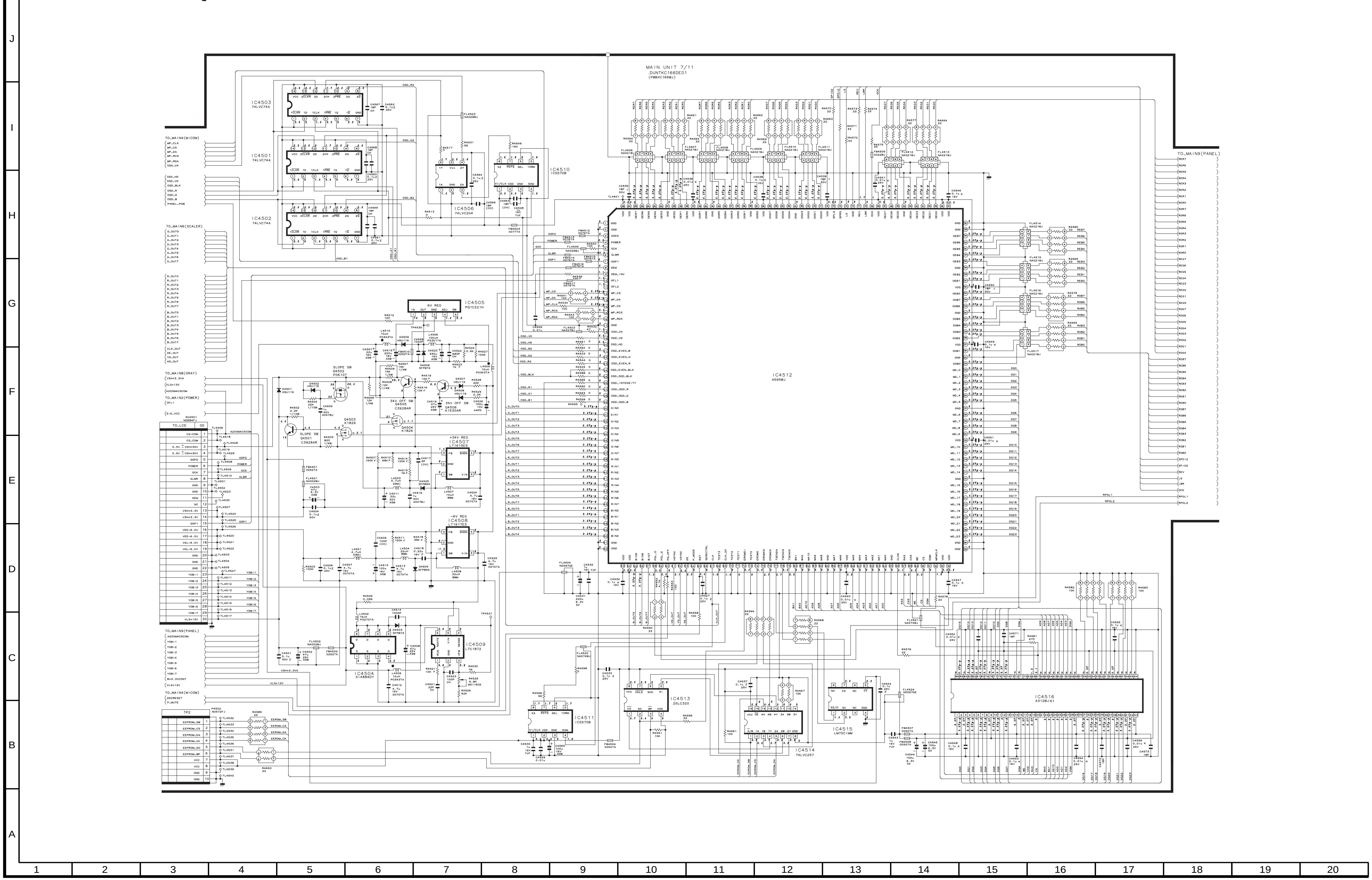
■ MAIN Unit - QS-CONTROL 7/11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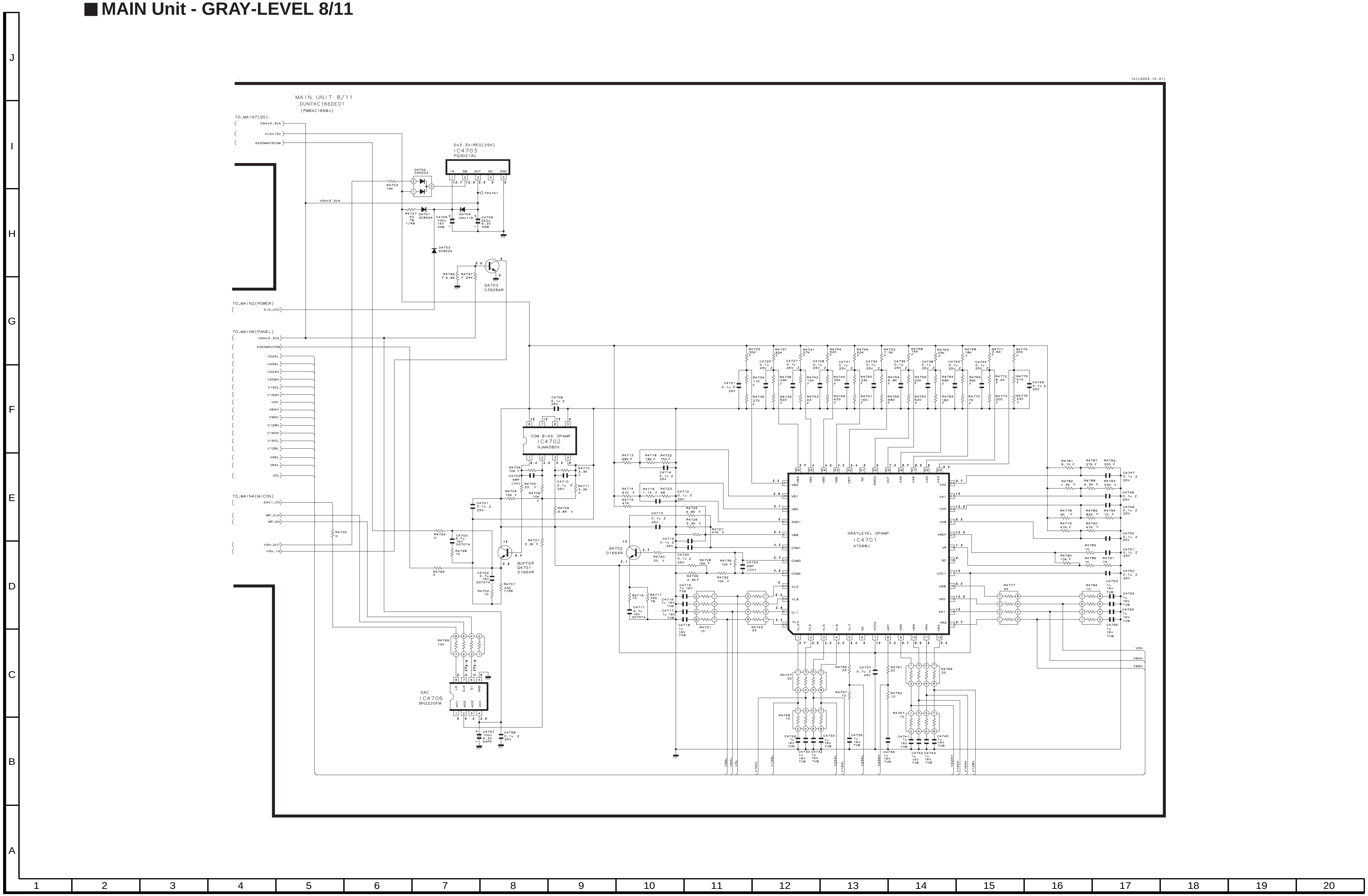
MAIN UNIT 7/11
DUNTKC166DE01
(PWBKC166WJ)
IC4503
74LVC74A
IC4501
74LVC74A
IC4502
74LVC74A
IC4506
74LVC2G4
IC4510
ICS570B
IC4505
PQ1CZ21H
6V REG
IC4507
LT1615ES
+34V REG
IC4508
LT1617ES
-6V REG
IC4504
SI4884DY
IC4509
LTC1872
IC4511
ICS570B
IC4513
25LC320
IC4514
74LVC257
IC4515
LM70CIMM
IC4512
A595WJ
IC4516
A3128WJN1
Q4501
C3928AR
Q4502
FG6101
Q4503
K1826
Q4504
K1826
Q4505
C3928AR
Q4506
A1530AR
SLOPE SW
34V OFF SW
TO_MAIN4(MICOM)
TO_MAIN5(SCALER)
TO_MAIN8(GRAY)
TO_MAIN2(POWER)
TO_MAIN9(PANEL)
TO_MAIN4(MICOM)
TO_LCD
TP2

■ MAIN Unit - GRAY-LEVEL 8/11



MAIN UNIT 8/11
DUNTKC166DE01
(PWBXC166WJ)
TO_MAIN7(QS)
VSH+3.3VA
VLS+13V
A200MACSCOM
D+3.3V-REG(VSH)
IC4703
PQ3DZ13U
IN SW OUT NC GND
D4702
DAN222
R4703
10K
TP4701
D4701
SC8024
D4704
HSU119
C4706
100u
16V
C4709
220u
6.3V
D4703
SC8024
R4796
R4797
Q4703
C3928AR
TO_MAIN2(POWER)
SIG_VCC
TO_MAIN9(PANEL)
VSH+3.3VA
A300MAVCOM
V224L
V256L
V224H
V256H
V192L
V192H
VOH
V64H
V96H
V128H
V160H
V160L
V128L
V96L
V64L
VOL
TO_MAIN4(MICON)
DAC1_CS
MP_CLK
MP_DA
VSH_OUT
VSH_IN
R4700
C4708
0.1u Z
25V
COM BIAS OPAMP
IC4702
NJM4580V
BUFFER
Q4701
D1664R
Q4702
D1664R
GRAYLEVEL OPAMP
IC4701
A706WJ
VB2 VB1 VB0 GND1 VB8 COM1 COM0 COMS VL0 VL8 VL1 VL2
VA2 VA1 VA0 VA8 VREF VR NC VCC1 VR8 VR0 VR1 VR2
DAC
IC4706
BH2220FM
C4757
100u
6.3V
C4758
0.1u Z
25V
VOH
V64H
V96H
1st(2003.10.31)
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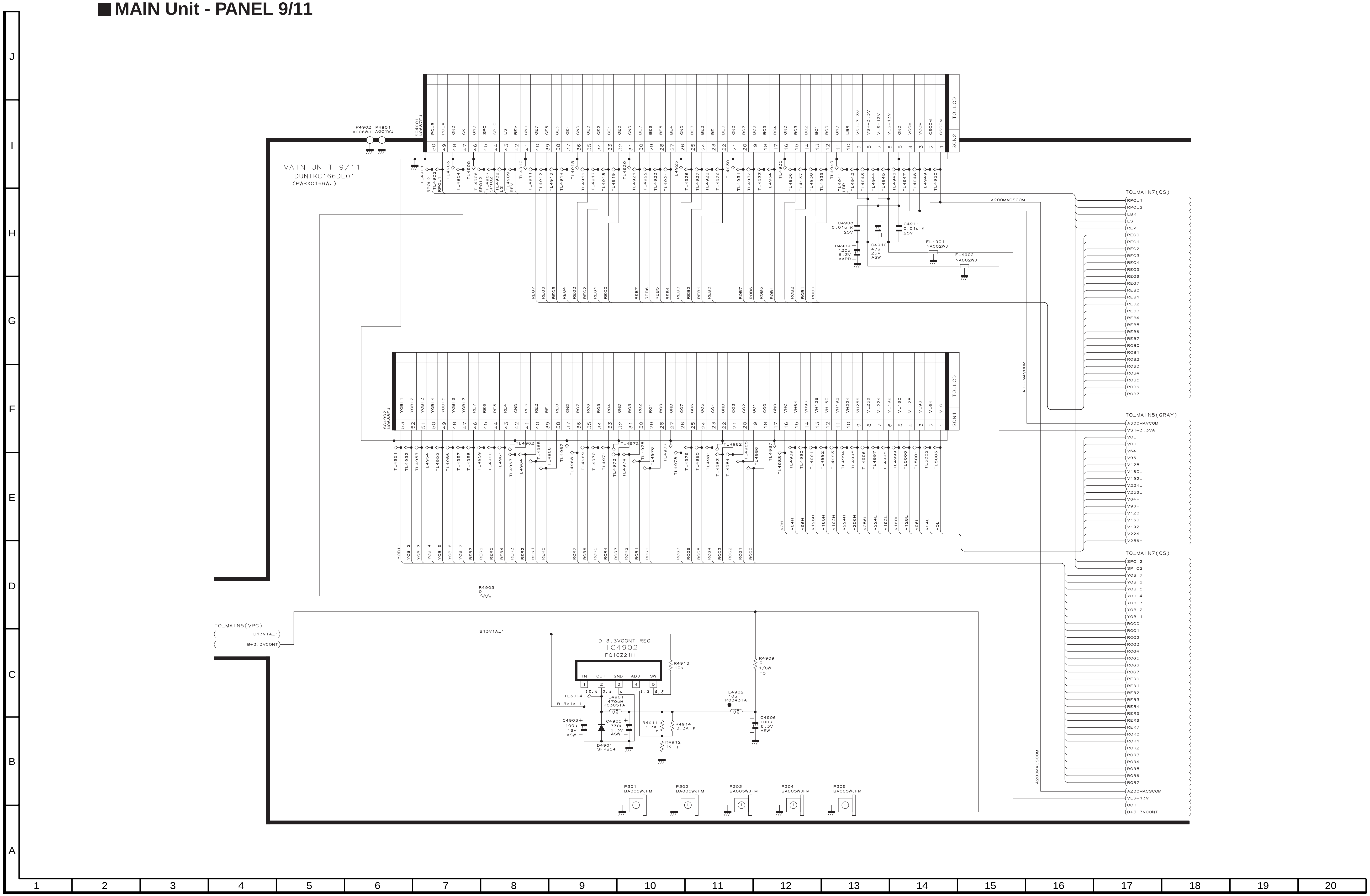
■ MAIN Unit - PANEL 9/11


MAIN UNIT 9/11
.DUNTKC166DE01
(PWBXC166WJ)
P4902 A006WJ
P4901 A001WJ
SC4901 N068FJ
SCN2
TO_LCD
SC4902 N068BFJ
SCN1
TO_LCD
A200MACSCOM
A300MAVCOM
C4908 0.01u K 25V
C4909 120u 6.3V AAPD
C4910 47u 25V ASW
C4911 0.01u K 25V
FL4901 NA002WJ
FL4902 NA002WJ
TO_MAIN7(QS)
TO_MAIN8(GRAY)
TO_MAIN7(QS)
TO_MAIN5(VPC)
B13V1A_1
B+3.3VCONT
R4905 0
D+3.3VCONT-REG
IC4902
PQ1CZ21H
IN OUT GND ADJ SW
R4913 10K
R4909 0 1/8W TQ
TL5004
B13V1A_1
L4901 470uH P0305TA
L4902 10uH P0343TA
C4903 100u 16V ASW
C4905 330u 6.3V ASW
C4906 100u 6.3V ASW
D4901 SFPB54
R4911 3.3K F
R4914 3.3K F
R4912 1K F
12.6
3.3
0
1.3
9.5
P301 BA005WJFM
P302 BA005WJFM
P303 BA005WJFM
P304 BA005WJFM
P305 BA005WJFM
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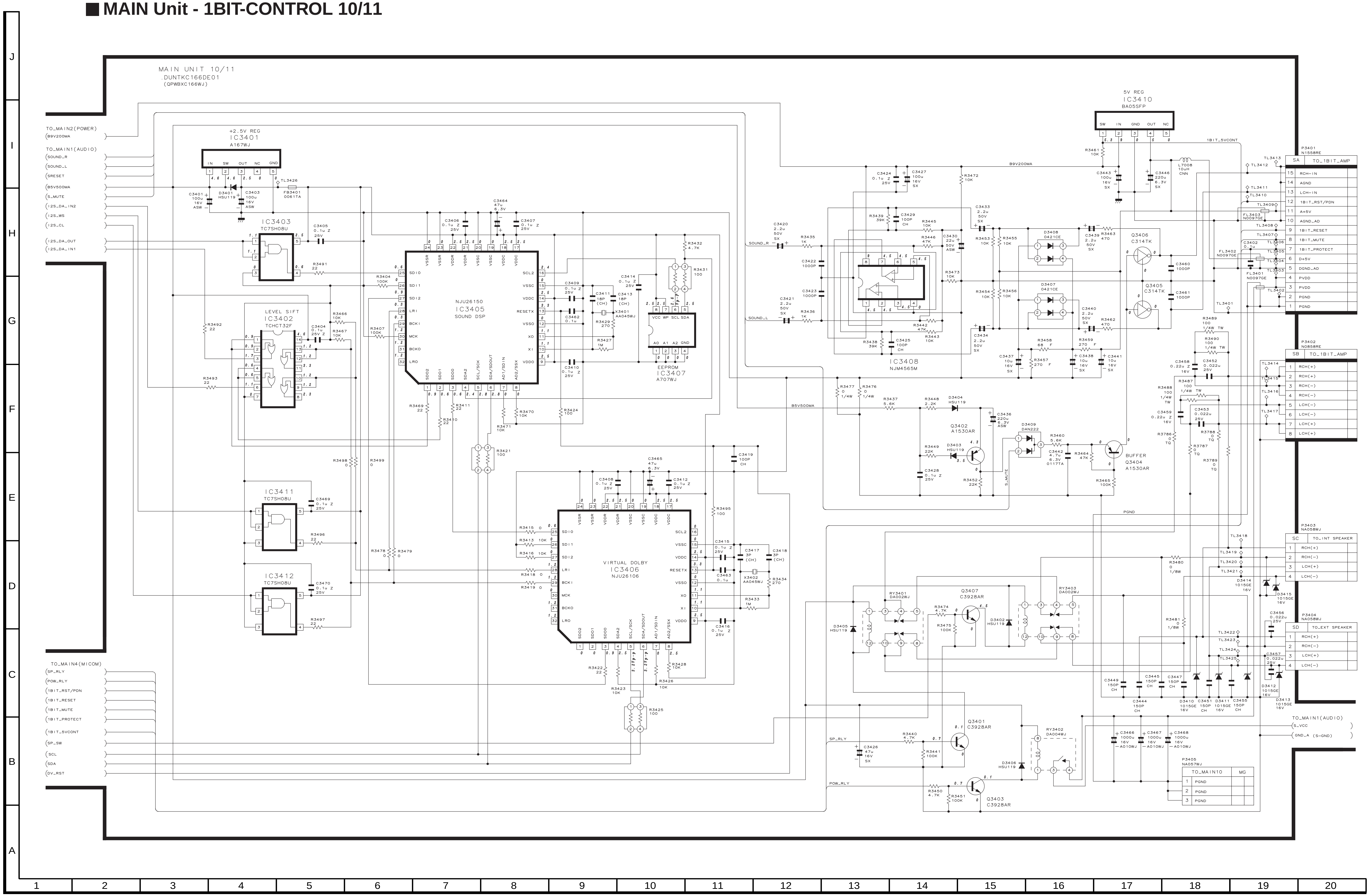
■ MAIN Unit - 1BIT-CONTROL 10/11


MAIN UNIT 10/11
DUNTKC166DE01
(QPWBXC166WJ)
TO_MAIN2(POWER)
B9V200MA
TO_MAIN1(AUDIO)
SOUND_R
SOUND_L
SRESET
B5V500MA
S_MUTE
I2S_DA_IN2
I2S_WS
I2S_CL
I2S_DA_OUT
I2S_DA_IN1
+2.5V REG
IC3401
A167WJ
D3401
HSU119
FB3401
0061TA
TL3426
IC3403
TC7SH08U
LEVEL SIFT
IC3402
TCHCT32F
NJU26150
IC3405
SOUND DSP
X3401
AA045WJ
EEPROM
IC3407
A707WJ
IC3411
TC7SH08U
IC3412
TC7SH08U
VIRTUAL DOLBY
IC3406
NJU26106
X3402
AA045WJ
TO_MAIN4(MICOM)
SP_RLY
POW_RLY
1BIT_RST/PDN
1BIT_RESET
1BIT_MUTE
1BIT_PROTECT
1BIT_5VCONT
SP_SW
SCL
SDA
DV_RST
5V REG
IC3410
BA05SFP
B9V200MA
1BIT_5VCONT
L7008
10uH
CNN
IC3408
NJM4565M
D3408
D3407
Q3406
C314TK
Q3405
C314TK
B5V500MA
Q3402
A1530AR
D3404
HSU119
D3403
HSU119
D3409
DAN222
BUFFER
Q3404
A1530AR
S_MUTE
PGND
P3401
N15BRE
SA
TO_1BIT_AMP
RCH-IN
AGND
LCH-IN
1BIT_RST/PDN
A+5V
AGND_AD
1BIT_RESET
1BIT_MUTE
1BIT_PROTECT
D+5V
DGND_AD
PVDD
PGND
P3402
N08BRE
SB
TO_1BIT_AMP
RCH(+)
RCH(-)
LCH(-)
LCH(+)
P3403
NA058WJ
SC
TO_INT SPEAKER
P3404
NA058WJ
SD
TO_EXT SPEAKER
RY3401
DA002WJ
Q3407
C3928AR
D3402
HSU119
RY3403
DA002WJ
D3405
HSU119
Q3401
C3928AR
RY3402
DA004WJ
D3406
HSU119
Q3403
C3928AR
SP_RLY
POW_RLY
TO_MAIN1(AUDIO)
S_VCC
GND_A (S-GND)
P3405
NA057WJ
TO_MAIN10
MG
PGND
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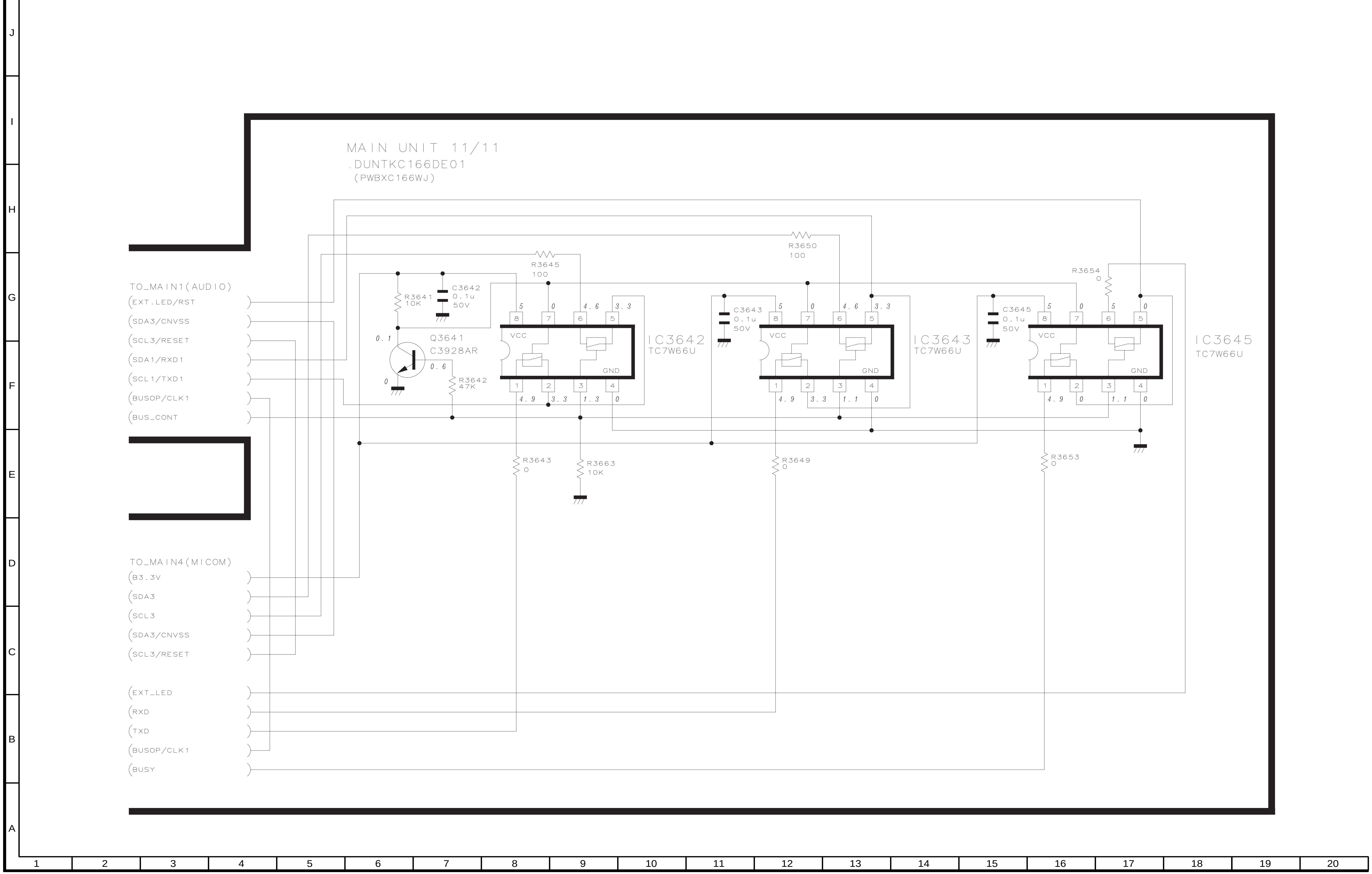
■ MAIN Unit - CTRL-SW 11/11


MAIN UNIT 11/11
.DUNTKC166DE01
(PWBXC166WJ)
TO_MAIN1(AUDIO)
EXT.LED/RST
SDA3/CNVSS
SCL3/RESET
SDA1/RXD1
SCL1/TXD1
BUSOP/CLK1
BUS_CONT
TO_MAIN4(MICOM)
B3.3V
SDA3
SCL3
SDA3/CNVSS
SCL3/RESET
EXT_LED
RXD
TXD
BUSOP/CLK1
BUSY
R3641 10K
C3642 0.1u 50V
Q3641 C3928AR
R3642 47K
R3645 100
R3643 0
R3663 10K
IC3642 TC7W66U
C3643 0.1u 50V
R3650 100
R3649 0
IC3643 TC7W66U
C3645 0.1u 50V
R3654 0
R3653 0
IC3645 TC7W66U
VCC
GND
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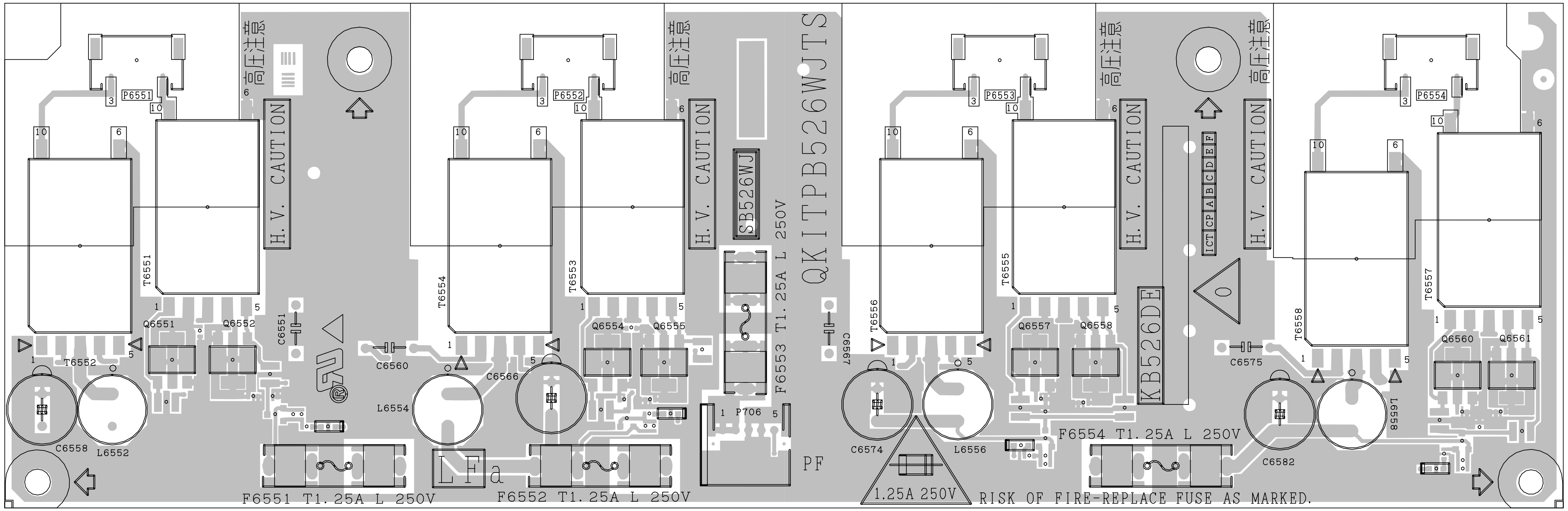
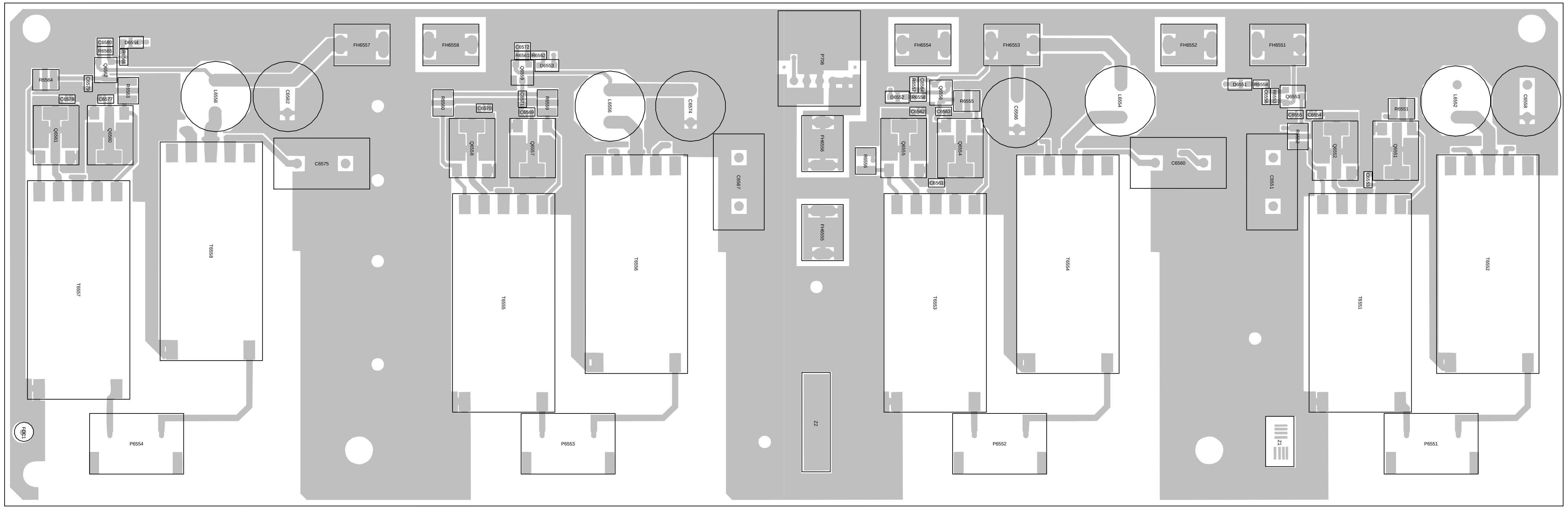
PRINTED WIRING BOARD ASSEMBLIES


P6551
P6552
P6553
P6554
高圧注意
H. V. CAUTION
T6551
T6552
T6553
T6554
T6555
T6556
T6557
T6558
Q6551
Q6552
Q6554
Q6555
Q6557
Q6558
Q6560
Q6561
C6551
C6558
C6560
C6566
C6567
C6574
C6575
C6582
L6552
L6554
L6556
L6558
SB526WJ
QKITPB526WJTS
KB526DE
P706
F6551 T1.25A L 250V
F6552 T1.25A L 250V
F6553 T1.25A L 250V
F6554 T1.25A L 250V
1.25A 250V
RISK OF FIRE-REPLACE FUSE AS MARKED.
PF
ICT CP A B C D E F

INVERTER Unit (Side-A)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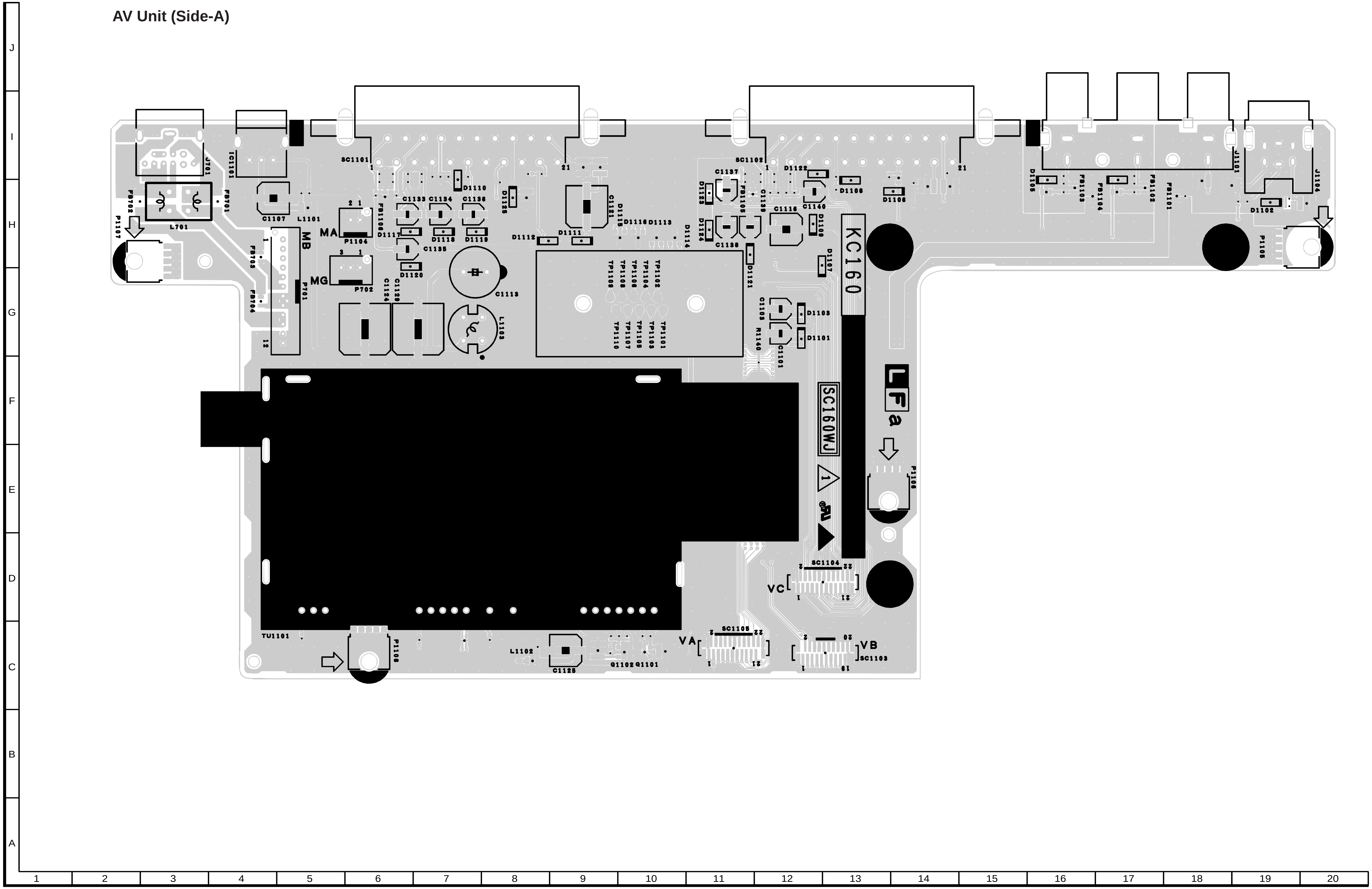
FH6552
FH6553
FH6554
FH6555
FH6556
FH6557
FH6558
P6551
P6552
P6553
P6554
P706
T6551
T6552
T6553
T6554
T6555
T6556
T6557
T6558
C6551
C6560
C6567
C6575
Z1
Z2

INVERTER Unit (Chip Parts Side-A)

AV Unit (Side-A)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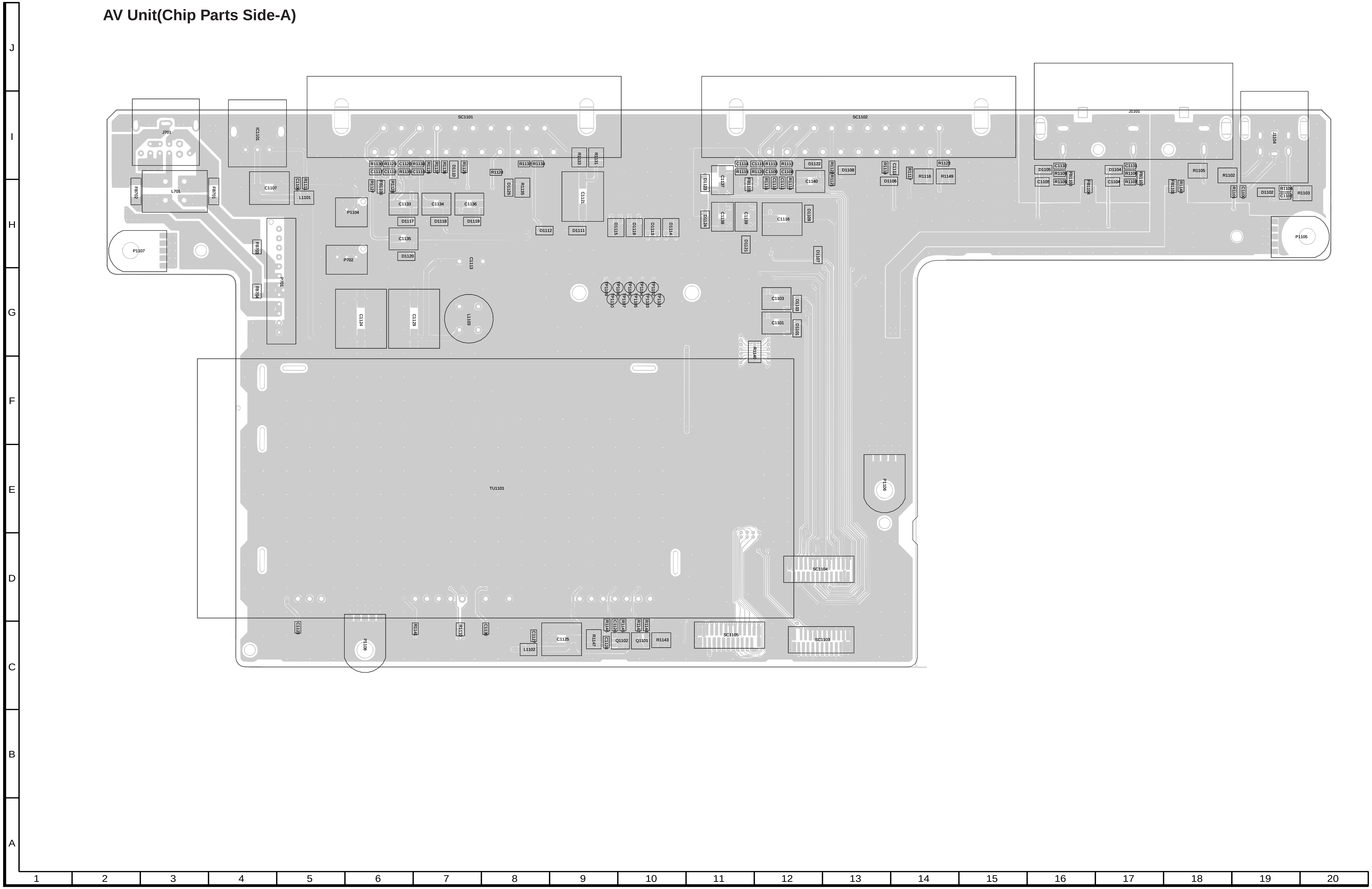
J701
IC1101
FB702
FB701
L701
P1107
C1107
L1101
FB703
FB704
MA
MB
MG
P1104
P702
P701
SC1101
1
21
FB1109
D1117
C1133
C1134
C1136
D1110
D1125
D1118
D1119
C1135
D1120
C1124
C1126
C1113
L1103
C1121
D1115
D1116
D1113
D1112
D1111
D1114
TP1101
TP1102
TP1103
TP1104
TP1105
TP1106
TP1107
TP1108
TP1109
TP1110
SC1102
C1137
D1123
FB1105
C1139
D1122
C1140
D1108
D1106
C1116
D1109
D1124
C1138
D1121
D1107
KC160
C1103
D1103
R1140
C1101
D1101
SC160WJ
LFa
P1106
SC1104
VC
VA
SC1105
VB
SC1103
TU1101
P1108
L1102
C1125
Q1102
Q1101
J1101
J1104
D1105
FB1103
FB1104
FB1102
FB1101
D1102
P1105

AV Unit(Chip Parts Side-A)


J
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19
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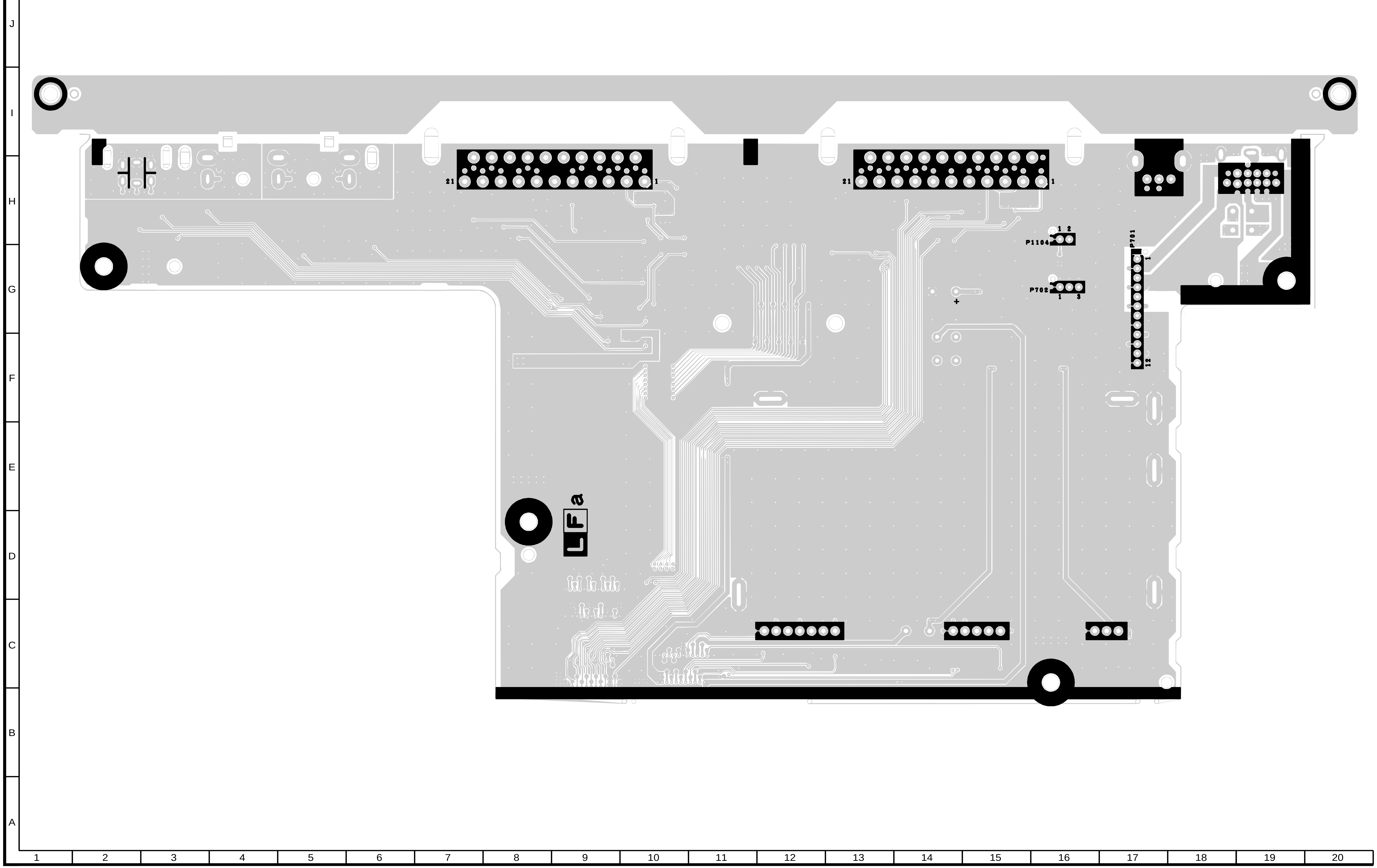
SC1101
SC1102
J1101
J1104
J701
IC1101
L701
FB702
FB701
C1107
L1101
P1104
P702
P1107
P701
FB703
FB704
C1133
C1134
C1136
C1135
D1117
D1118
D1119
D1120
C1124
C1129
L1103
C1121
D1112
D1111
D1115
D1116
D1113
D1114
R1133
R1131
R1135
D1125
C1137
C1138
C1139
C1116
C1140
D1122
D1108
D1106
R1116
R1149
R1123
D1121
D1107
D1109
C1103
C1101
D1103
D1101
R1140
D1105
D1104
R1105
R1102
R1103
D1102
P1105
P1106
TU1101
SC1104
SC1105
SC1103
P1108
C1125
L1102
R1147
Q1102
Q1101
R1143

AV Unit (Side-B)


J
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G
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D
C
B
A
21
1
21
1
1 2
P1104
P702
1 3
P701
1
12
+
LFa
1
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4
5
6
7
8
9
10
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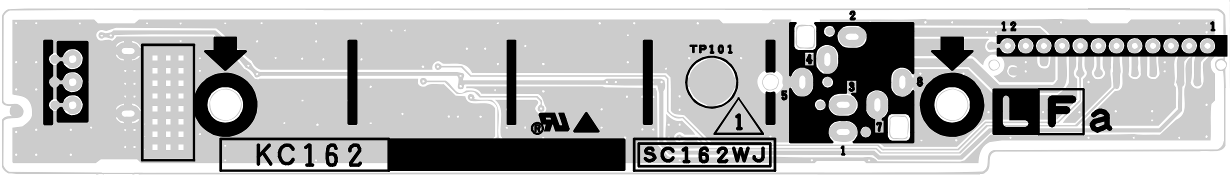
12
13
14
15
16
17
18
19
20

H

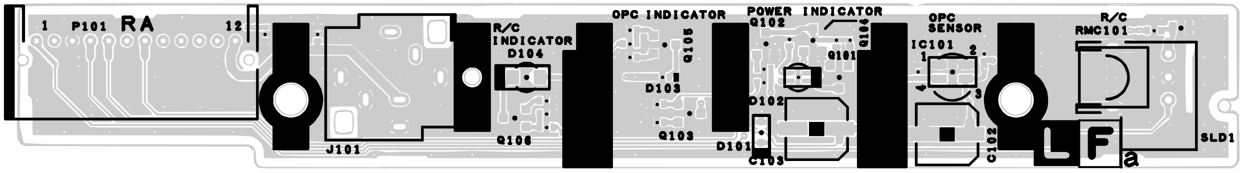
G


TP101
2
4
3
5
6
7
1
12
1
KC162
SC162WJ
LFa

R/C, LED Unit (Side-A)

F

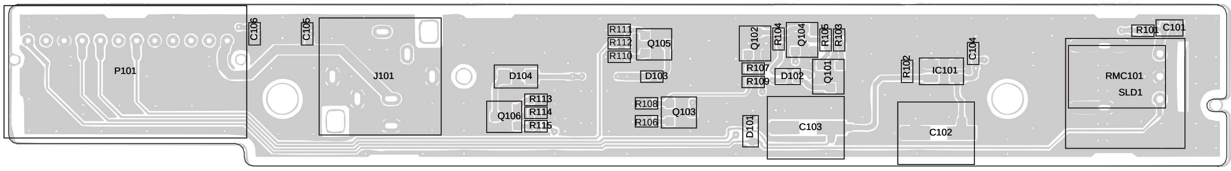
E


1
P101
RA
12
R/C
INDICATOR
D104
OPC INDICATOR
Q105
D103
POWER INDICATOR
Q102
Q104
Q101
D102
OPC
SENSOR
IC101
2
1
4
3
R/C
RMC101
J101
Q106
Q103
D101
C103
C102
LFa
SLD1

R/C, LED Unit (Side-B)

D

C


C106
C105
P101
J101
R111
R112
R110
Q105
D103
D104
R113
R114
R115
Q106
R108
R106
Q103
Q102
R104
Q104
R105
R103
R107
R109
D102
Q101
D101
C103
R102
IC101
C104
C102
R101
C101
RMC101
SLD1

RC, LED Unit(Chip Parts Side-B)

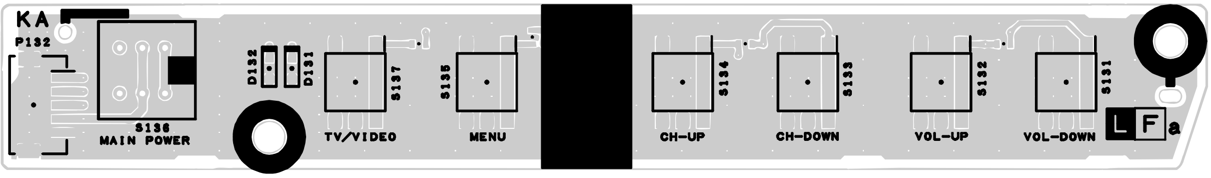
B

A

1 2 3 4 5 6

H

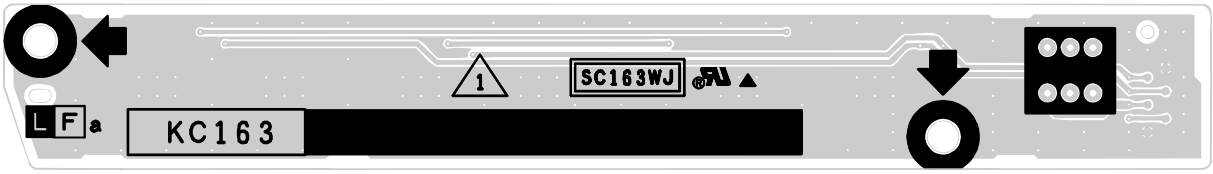
G


KA
P132
S136
MAIN POWER
D132
D131
S137
TV/VIDEO
S135
MENU
S134
CH-UP
S133
CH-DOWN
S132
VOL-UP
S131
VOL-DOWN
L F a

OPERATION Unit (Side-A)

F

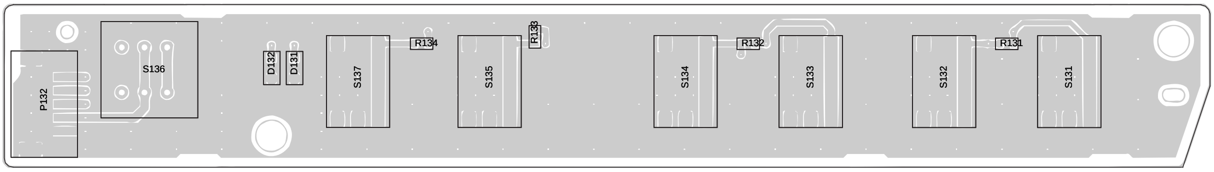
E


1
SC163WJ
L F a
KC163

OPERATION Unit (Side-B)

D

C


P132
S136
D132
D131
S137
R134
S135
R133
S134
R132
S133
S132
R131
S131

OPERATION Unit (Chip Parts Side-B)

B

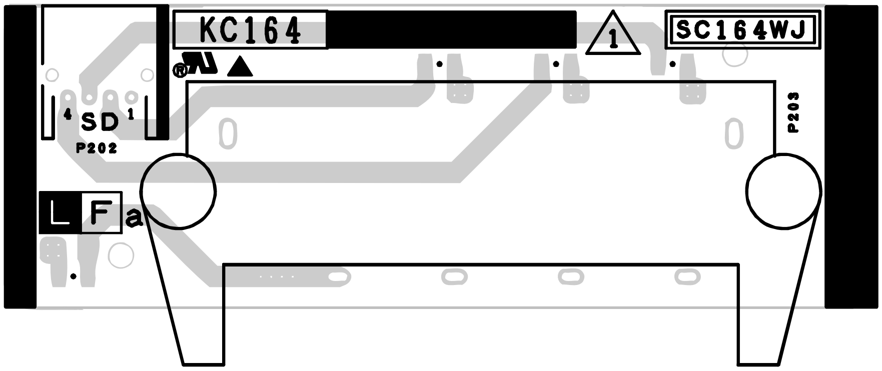
A

1 2 3 4 5 6

H

G

F


KC164
SC164WJ
1
4
SD
1
P202
P203
L
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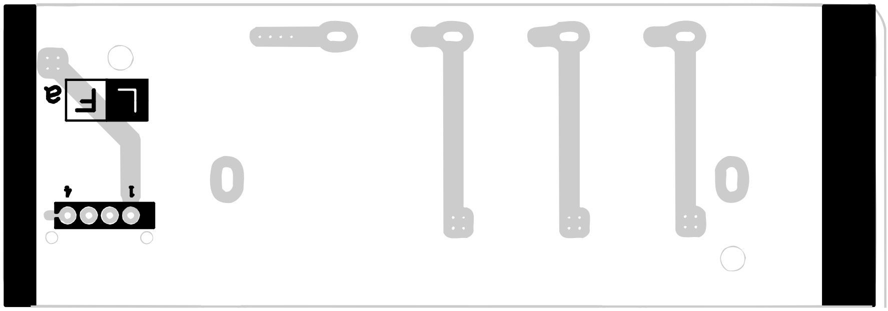
a

E

EXT-SP TERMINAL Unit (Side-A)

D



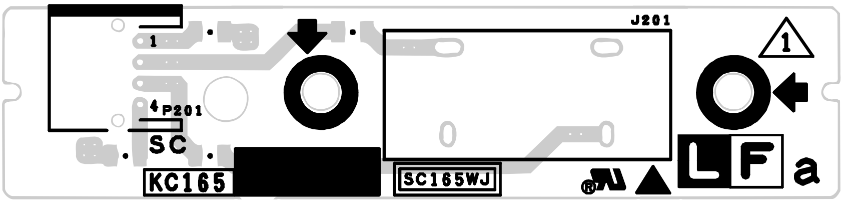
C

EXT-SP TERMINAL Unit (Side-B)

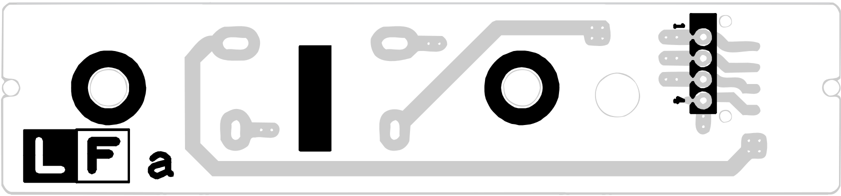
B

A

1 2 3 4 5 6 7 8 9 10

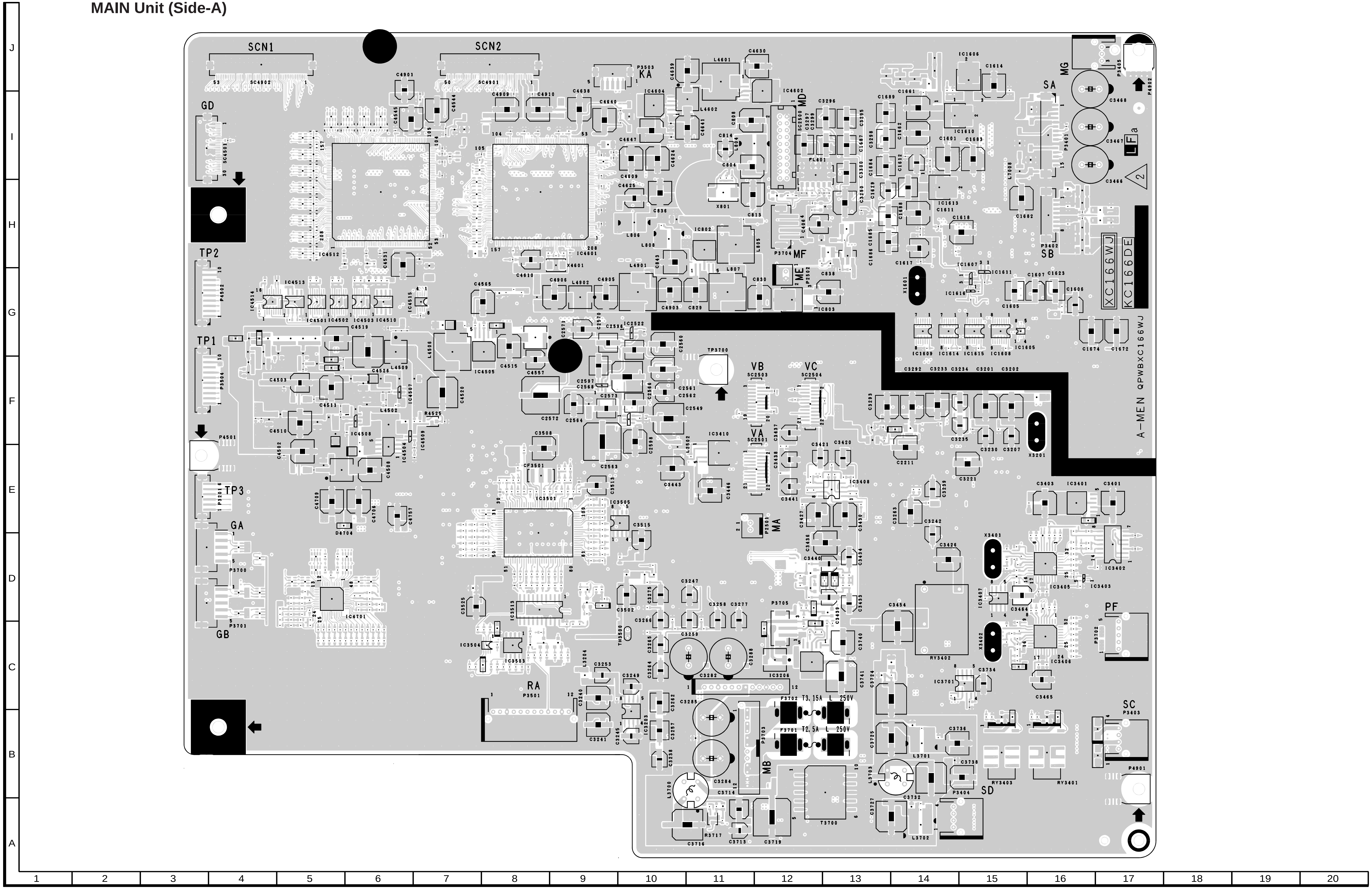

J201
1
1
4
P201
SC
KC165
SC165WJ
L F a

SP-JACK Unit (Side-A)



SP-JACK Unit (Side-B)

MAIN Unit (Side-A)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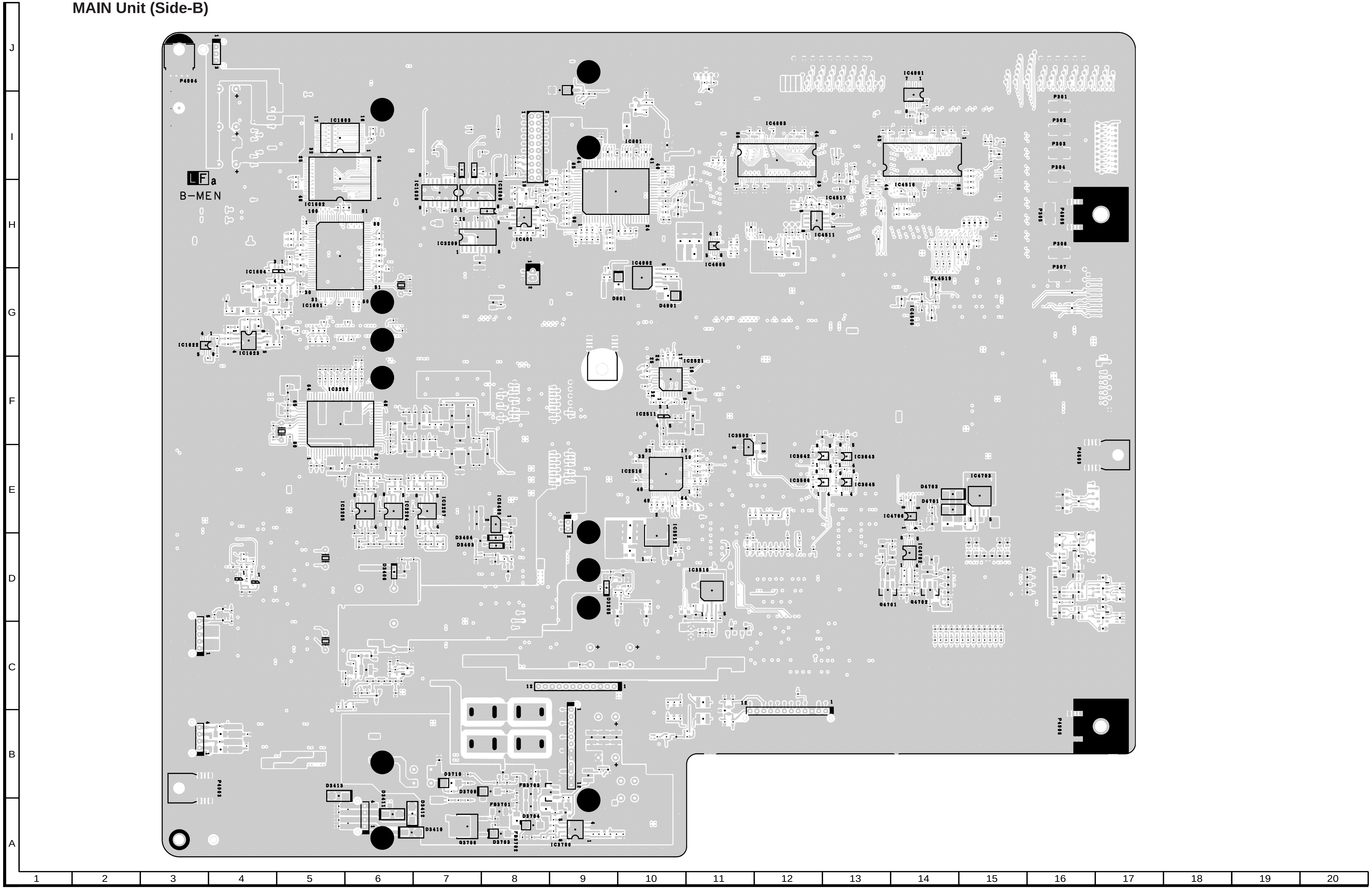
SCN1
SCN2
GD
TP2
TP1
TP3
GA
GB
KA
MD
MF
ME
MG
SA
SB
VB
VC
VA
MA
MB
RA
PF
SC
SD
XC166WJ
KC166DE
A-MEN QPWBXC166WJ
F3702 T3.15A L 250V
F3701 T2.5A L 250V
IC4701
IC3501
IC1606
T3700
RY3402
RY3403
RY3401

MAIN Unit (Side-B)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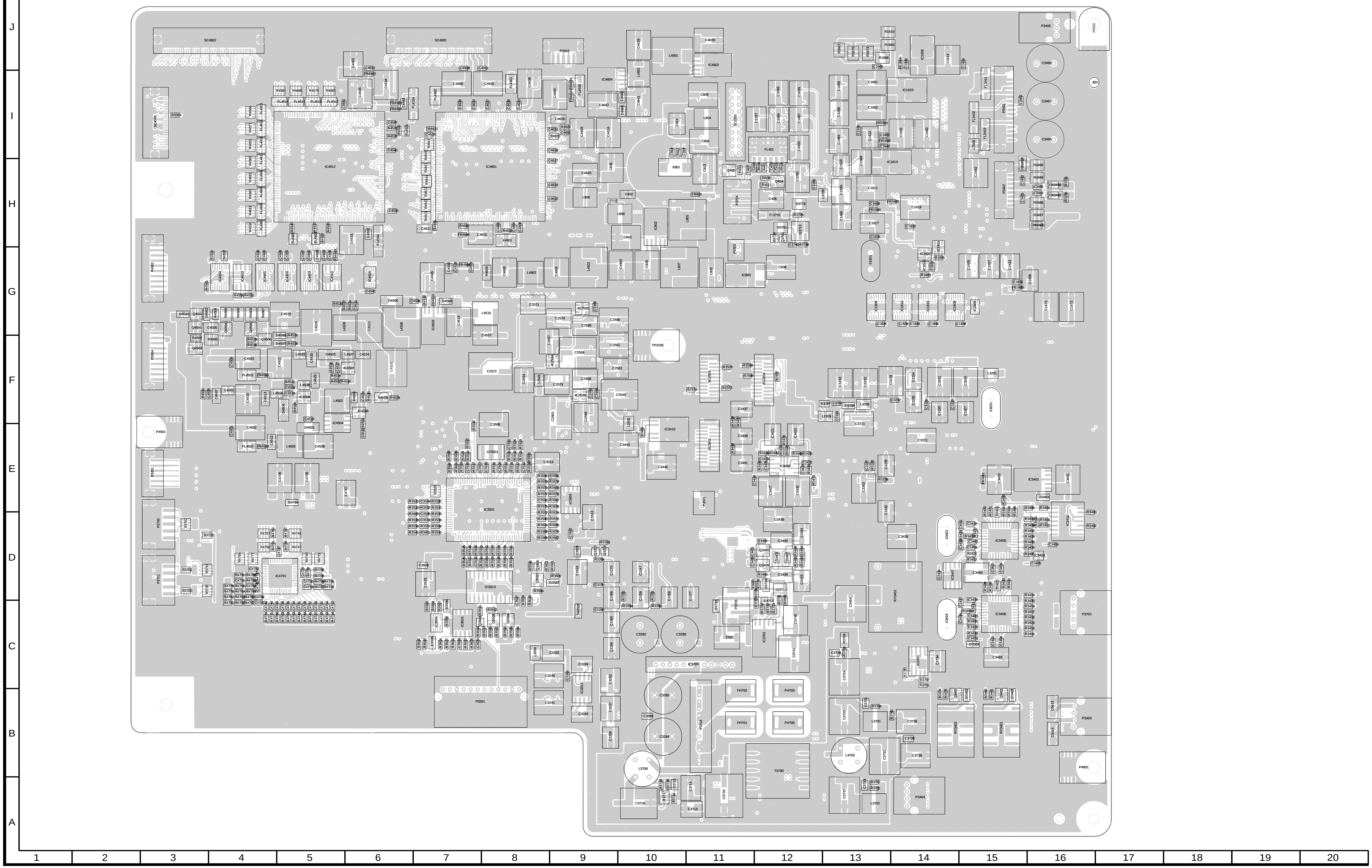
P4904
LFa
B-MEN
IC1603
IC1602
IC1601
IC1604
IC1622
IC1623
IC3202
IC3205
IC3204
IC3207
IC401
IC801
IC4902
D801
D4901
IC4805
IC4603
IC4901
IC4516
IC4517
IC4511
FL4518
P301
P302
P303
P304
P306
P307
P4905
IC2521
IC2511
IC2510
IC3502
IC3642
IC3643
IC3645
IC4703
D4703
D4701
IC4706
Q4701
Q4702
P4903
IC3512
IC3510
D3404
D3403
D3409
P4908
P4906
D3413
D3410
D3412
D3710
D3708
FB3701
FB3703
D3704
D3703
FB3702
Q3708
IC3700

MAIN Unit (Chip Parts Side-A)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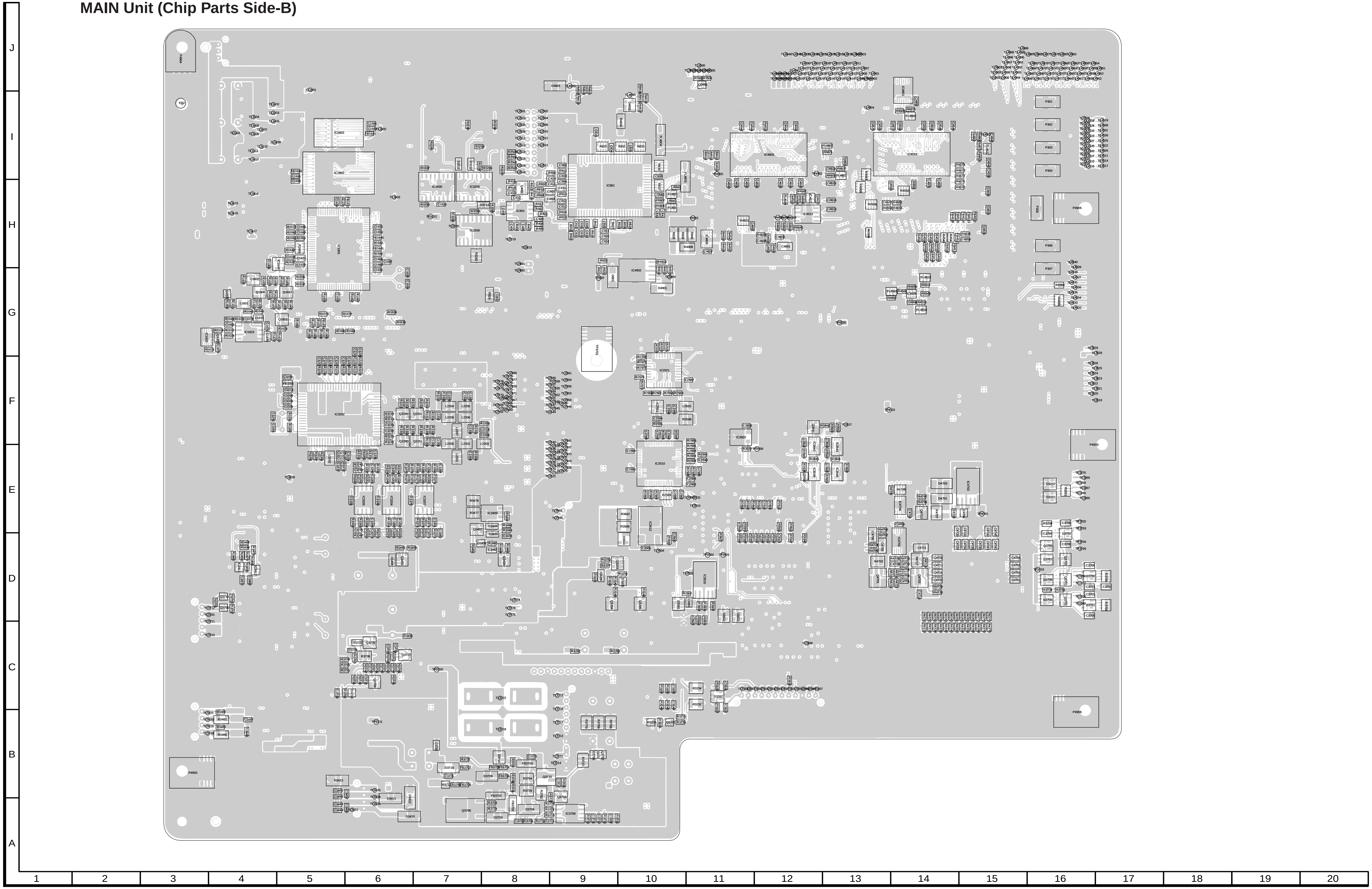
SC4902
SC4901
IC4512
IC4601
IC4604
IC3501
IC3513
IC4701
IC3410
IC3405
IC3406
IC3401
IC1610
IC1613
P3501
P3405
P3702
P3403
P4901
T3700
TP3700
L3700
L3703

MAIN Unit (Chip Parts Side-B)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PARTS LIST

PARTS REPLACEMENT

Replacement parts which have these special safety characteristics identified in this manual; electrical components having such features are identified by ⚠ and shaded areas in the Replacement Parts Lists and Schematic Diagrams. The use of a substitute replacement part which dose no have the same safety characteristic as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION

★ MARK: SPARE PARTS-DELIVERY SECTION

PRINTED WIRING BOARD ASSEMBLIES (*NOT REPLACEMENT ITEM*)

Ref. No.	Part No.	★	Description	Code
	DUNTKB973FE04	–	INVERTER Unit	—
	DUNTKC160DE01	–	AV Unit	—
	DUNTKC162DE01	–	R/C, LED Unit	—
	DUNTKC163DE01	–	OPERATION Unit	—
	DUNTKC164DE01	–	EXT-SP TERMINAL Unit	—
	DUNTKC165DE01	–	SP-JACK Unit	—
	DUNTKC166FE01	–	MAIN Unit	—
	RUNTKA060WJZZ	J	EU-DIGITAL Unit	CR
	B2SX4052BT	J	1BIT-AMP Unit (Unit Replacement Item)	BL

LCD PANEL

NOTE: THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

Ref. No.	Part No.	★	Description	Code
	RLCDTA021WJZZ	J	22" LCD panel unit	EM

DUNTKB973FE04 INVERTER Unit

TRANSISTORS

Ref. No.	Part No.	★	Description	Code
Q6551	VS2SC5886++-1Y	J	2SC5886	AE
Q6552	VS2SC5886++-1Y	J	2SC5886	AE
Q6553	VS2SA1037KQ-1Y	J	2SA1037KQ	AA
Q6554	VS2SC5886++-1Y	J	2SC5886	AE
Q6555	VS2SC5886++-1Y	J	2SC5886	AE
Q6556	VS2SA1037KQ-1Y	J	2SA1037KQ	AA
Q6557	VS2SC5886++-1Y	J	2SC5886	AE
Q6558	VS2SC5886++-1Y	J	2SC5886	AE
Q6559	VS2SA1037KQ-1Y	J	2SA1037KQ	AA
Q6560	VS2SC5886++-1Y	J	2SC5886	AE
Q6561	VS2SC5886++-1Y	J	2SC5886	AE
Q6562	VS2SA1037KQ-1Y	J	2SA1037KQ	AA
Q6563	VS2SC2412KQ-1Y	J	2SC2412KQ	AA
Q6564	VS2SC2412KQ-1Y	J	2SC2412KQ	AA
Q6565	VS2SC2412KQ-1Y	J	2SC2412KQ	AA
Q6566	VS2SC2412KQ-1Y	J	2SC2412KQ	AA
Q6567	VS2SC2412KQ-1Y	J	2SC2412KQ	AA
Q6568	VS2SC2412KQ-1Y	J	2SC2412KQ	AA
Q6569	VS2SC2412KQ-1Y	J	2SC2412KQ	AA
Q6570	VS2SC2412KQ-1Y	J	2SC2412KQ	AA

DIODES

Ref. No.	Part No.	★	Description	Code
D6551	VHDHSU119//-1Y	J	Diode	AB
D6552	VHDHSU119//-1Y	J	Diode	AB
D6553	VHDHSU119//-1Y	J	Diode	AB
D6554	VHDHSU119//-1Y	J	Diode	AB

COILS

Ref. No.	Part No.	★	Description	Code
L6552	RCiLPA034WJZZ	J	Coil	AD
L6554	RCiLPA034WJZZ	J	Coil	AD
L6556	RCiLPA034WJZZ	J	Coil	AD
L6558	RCiLPA034WJZZ	J	Coil	AD

TRANSFORMERS

Ref. No.	Part No.	★	Description	Code
⚠ T6551	RTRNZA038WJZZQ	J	Transformer	AP
⚠ T6552	RTRNZA038WJZZQ	J	Transformer	AP
⚠ T6553	RTRNZA038WJZZQ	J	Transformer	AP
⚠ T6554	RTRNZA038WJZZQ	J	Transformer	AP

CAPACITORS

Ref. No.	Part No.	★	Description			Code
C6551	RC-FZA108WJZZ	J	0.12	250V	Film	AD
C6555	VCKYCY1CB333KY	J	0.033	16V	Ceramic	AA
C6556	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C6558	RC-EZA216WJZZ	J	1000	16V	Electrolytic	AD
C6560	RC-FZA108WJZZ	J	0.12	250V	Film	AD
C6563	VCKYCY1CB333KY	J	0.033	16V	Ceramic	AA
C6564	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C6566	RC-EZA216WJZZ	J	1000	16V	Electrolytic	AD
C6567	RC-FZA108WJZZ	J	0.12	250V	Film	AD
C6571	VCKYCY1CB333KY	J	0.033	16V	Ceramic	AA
C6572	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C6574	RC-EZA216WJZZ	J	1000	16V	Electrolytic	AD
C6575	RC-FZA108WJZZ	J	0.12	250V	Film	AD
C6579	VCKYCY1CB333KY	J	0.033	16V	Ceramic	AA
C6580	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C6582	RC-EZA216WJZZ	J	1000	16V	Electrolytic	AD

RESISTORS

Ref. No.	Part No.	★	Description			Code
R6551	VRS-TW2ED182JY	J	1.8k	1/4W	Metal Oxide	AA
R6553	VRS-CY1JF822JY	J	8.2k	1/16W	Metal Oxide	AA
R6554	VRS-CY1JF333JY	J	33k	1/16W	Metal Oxide	AA
R6555	VRS-TW2ED182JY	J	1.8k	1/4W	Metal Oxide	AA
R6557	VRS-CY1JF822JY	J	8.2k	1/16W	Metal Oxide	AA
R6558	VRS-CY1JF333JY	J	33k	1/16W	Metal Oxide	AA
R6559	VRS-TW2ED182JY	J	1.8k	1/4W	Metal Oxide	AA
R6561	VRS-CY1JF822JY	J	8.2k	1/16W	Metal Oxide	AA
R6562	VRS-CY1JF333JY	J	33k	1/16W	Metal Oxide	AA
R6563	VRS-TW2ED182JY	J	1.8k	1/4W	Metal Oxide	AA

DUNTKB973FE04 INVERTER Unit (Continued)

Ref. No.	Part No.	★	Description	Code
R6565	VRS-CY1JF822JY	J	8.2k 1/16W Metal Oxide	AA
R6566	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R6567	VRS-TW2ED182JY	J	1.8k 1/4W Metal Oxide	AA
R6568	VRS-CY1JF121JY	J	120 1/16W Metal Oxide	AA
R6569	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R6570	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R6571	VRS-TW2ED182JY	J	1.8k 1/4W Metal Oxide	AA
R6572	VRS-CY1JF121JY	J	120 1/16W Metal Oxide	AA
R6573	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R6574	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R6575	VRS-TW2ED182JY	J	1.8k 1/4W Metal Oxide	AA
R6576	VRS-CY1JF121JY	J	120 1/16W Metal Oxide	AA
R6577	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R6578	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R6579	VRS-TW2ED182JY	J	1.8k 1/4W Metal Oxide	AA
R6580	VRS-CY1JF121JY	J	120 1/16W Metal Oxide	AA
R6581	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R6582	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R6583	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R6584	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R6585	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R6586	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R6587	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R6588	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA

MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
⚠ F6551	QFS-D0006CEZZ	J	Fuse, 1.25A/250V	AF
⚠ F6552	QFS-D0006CEZZ	J	Fuse, 1.25A/250V	AF
⚠ F6553	QFS-D0006CEZZ	J	Fuse, 1.25A/250V	AF
⚠ F6554	QFS-D0006CEZZ	J	Fuse, 1.25A/250V	AF
FH6551	QFSHD1002CEZZ	J	Fuse Holder	AA
FH6552	QFSHD1002CEZZ	J	Fuse Holder	AA
FH6553	QFSHD1002CEZZ	J	Fuse Holder	AA
FH6554	QFSHD1002CEZZ	J	Fuse Holder	AA
FH6555	QFSHD1002CEZZ	J	Fuse Holder	AA
FH6556	QFSHD1002CEZZ	J	Fuse Holder	AA
FH6557	QFSHD1002CEZZ	J	Fuse Holder	AA
FH6558	QFSHD1002CEZZ	J	Fuse Holder	AA
P6551	QPLGN0155FJZZY	J	Plug, 3pin (LA)	AE
P6552	QPLGN0155FJZZY	J	Plug, 3pin (LB)	AE
P6553	QPLGN0155FJZZY	J	Plug, 3pin (LC)	AE
P6554	QPLGN0155FJZZY	J	Plug, 3pin (LD)	AE
P6555	QPLGNA059WJZZ	J	Plug, 5pin (PF)	AC

DUNTKC160DE01 AV Unit

OPT DEVICE

Ref. No.	Part No.	★	Description	Code
IC1101	VHPGP1FH5TZ-1	J	PhotoDiode	AP

TRANSISTORS

Ref. No.	Part No.	★	Description	Code
Q1101	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q1102	VS2SC3928AR-1Y	J	2SC3928AR	AB

DIODES

Ref. No.	Part No.	★	Description	Code
D1101	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
D1102	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
D1103	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
D1104	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
D1105	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
D1106	RH-EX1264CEZZY	J	Zener Diode, 10V	AB
D1107	RH-EX1264CEZZY	J	Zener Diode, 10V	AB
D1108	RH-EX1264CEZZY	J	Zener Diode, 10V	AB
D1109	RH-EX1264CEZZY	J	Zener Diode, 10V	AB
D1110	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
D1111	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
D1112	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
D1113	RH-EX1315CEZZY	J	Zener Diode	AC
D1114	RH-EX1315CEZZY	J	Zener Diode	AC
D1115	RH-EX1315CEZZY	J	Zener Diode	AC
D1116	RH-EX1315CEZZY	J	Zener Diode	AC
D1117	RH-EX1264CEZZY	J	Zener Diode, 10V	AB
D1118	RH-EX1264CEZZY	J	Zener Diode, 10V	AB
D1119	RH-EX1264CEZZY	J	Zener Diode, 10V	AB
D1120	RH-EX1264CEZZY	J	Zener Diode, 10V	AB
D1121	RH-EX1264CEZZY	J	Zener Diode, 10V	AB
D1122	RH-EX1264CEZZY	J	Zener Diode, 10V	AB
D1123	RH-EX1264CEZZY	J	Zener Diode, 10V	AB
D1124	RH-EX1264CEZZY	J	Zener Diode, 10V	AB
D1125	RH-EX1264CEZZY	J	Zener Diode, 10V	AB

COILS

Ref. No.	Part No.	★	Description	Code
L701	RCiLFA069WJZZ	J	Coil	AH
L1101	VPCNN100J1R6NY	J	Peaking 10µH	AB
L1102	VPD9M4R7J1R4NY	J	Peaking 4.7µH	AB
L1103	RCiLPA027WJZZ	J	Coil	AD

CAPACITORS

Ref. No.	Part No.	★	Description	Code
C1100	VCKYCY1HB103KY	J	0.01 50V Ceramic	AA
C1101	VCEASX1CN106MY	J	10 16V Electrolytic	AC
C1102	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C1103	VCEASX1CN106MY	J	10 16V Electrolytic	AC
C1104	VCKYTV1CB105KY	J	1 16V Ceramic	AC
C1105	VCKYTV1CB105KY	J	1 16V Ceramic	AC
C1106	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C1107	RC-EZA127WJZZY	J	100 16V Electrolytic	AC
C1108	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C1109	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C1110	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C1111	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C1112	VCKYTV1CB105KY	J	1 16V Ceramic	AC
C1114	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C1115	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C1116	VCEASX1CN476MY	J	47 16V Electrolytic	AC
C1117	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C1118	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C1119	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C1120	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C1121	VCEASW0JN477MY	J	470 6.3V Electrolytic	AD
C1123	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C1124	VCAAPC0JJ337MY	J	330 6.3V Electrolytic	AG
C1125	VCEASX1CN107MY	J	100 16V Electrolytic	AC
C1126	VCKYCY1HF103ZY	J	0.01 50V Ceramic	AA
C1127	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C1128	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C1129	VCAAPC0JJ337MY	J	330 6.3V Electrolytic	AG
C1130	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C1131	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C1132	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA

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AV Unit (Continued)

Ref. No.	Part No.	★	Description	Code
C1133	VCEASX1CN106MY	J	10 16V Electrolytic	AC
C1134	VCEASX1CN106MY	J	10 16V Electrolytic	AC
C1135	VCEASX1CN106MY	J	10 16V Electrolytic	AC
C1136	VCEASX1CN106MY	J	10 16V Electrolytic	AC
C1137	VCEASX1CN106MY	J	10 16V Electrolytic	AC
C1138	VCEASX1CN106MY	J	10 16V Electrolytic	AC
C1139	VCEASX1CN106MY	J	10 16V Electrolytic	AC
C1140	VCEASX1CN106MY	J	10 16V Electrolytic	AC

RESISTORS

Ref. No.	Part No.	★	Description	Code
R1101	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R1102	VRS-TW2ED750JY	J	75 1/4W Metal Oxide	AA
R1103	VRS-TW2ED750JY	J	75 1/4W Metal Oxide	AA
R1104	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R1105	VRS-TW2ED750JY	J	75 1/4W Metal Oxide	AA
R1106	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R1107	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1108	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R1109	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1110	VRS-CA1JF220JY	J	22 1/16W Metal Oxide	AA
R1111	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R1112	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R1113	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R1114	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R1115	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R1116	VRS-TW2ED750JY	J	75 1/4W Metal Oxide	AA
R1117	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R1118	VRS-CY1JF750JY	J	75 1/16W Metal Oxide	AA
R1119	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R1120	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R1121	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R1122	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R1123	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R1124	VRS-CY1JF750JY	J	75 1/16W Metal Oxide	AA
R1125	VRS-CY1JF750JY	J	75 1/16W Metal Oxide	AA
R1126	VRS-CY1JF750JY	J	75 1/16W Metal Oxide	AA
R1127	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R1128	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R1129	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R1130	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R1131	VRS-TW2ED750JY	J	75 1/4W Metal Oxide	AA
R1132	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R1133	VRS-TW2ED750JY	J	75 1/4W Metal Oxide	AA
R1134	VRS-CY1JF750JY	J	75 1/16W Metal Oxide	AA
R1135	VRS-TW2ED750JY	J	75 1/4W Metal Oxide	AA
R1136	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R1137	VRS-CY1JF123JY	J	12k 1/16W Metal Oxide	AA
R1138	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R1139	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R1140	VRK-CD1JJ101JY	J	100 1/16W Metal Composition	AC
R1141	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R1142	VRS-CY1JF221JY	J	220 1/16W Metal Oxide	AA
R1143	VRS-TW2ED471JY	J	470 1/4W Metal Oxide	AA
R1144	VRS-CY1JF100JY	J	10 1/16W Metal Oxide	AA
R1145	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R1146	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R1147	VRS-TW2ED471JY	J	470 1/4W Metal Oxide	AA
R1148	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1149	VRS-TW2ED750JY	J	75 1/4W Metal Oxide	AA

MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
J701	QJAKE0193CEZZ	J	Jack, POWER INPUT	AK
J1101	QJAKGA004WJZZ	J	Jack, AV-IN3 VIDEO, AUDIO L/R	AF
J1104	QSOCD0456CEZZ	J	Socket, AV-IN3 S-VIDEO	AE
P701	QPLGNA051WJZZ	J	Plug, 12pin (MB)	AB
P702	QPLGNA042WJZZ	J	Plug, 3pin (MG)	AB
P1104	QPLGNA041WJZZ	J	Plug, 2pin (MA)	AB
SC1101	QSOCZA059WJZZ	J	Socket, AV-IN2 (RGB) 21pin Euro-SCART	AG
SC1102	QSOCZA059WJZZ	J	Socket, AV-IN2 (AV) 21pin Euro-SCART	AG
SC1103	QSOCN0487FJZZY	J	Socket, 20pin (VB)	AE
SC1104	QSOCN0488FJZZY	J	Socket, 22pin (VC)	AE
SC1105	QSOCN0488FJZZY	J	Socket, 22pin (VA)	AE
P1105	QLUGHA006WJZZY	J	Lug	AC
P1106	QLUGHA006WJZZY	J	Lug	AC
P1107	QLUGHA006WJZZY	J	Lug	AC
P1108	QLUGHA006WJZZY	J	Lug	AC
	LANGT9102CEFW	J	Fixing Metal	AF
FB703	RBLN-0207TAZZY	J	Ferrite Bead	AA
FB704	RBLN-0207TAZZY	J	Ferrite Bead	AA
FB1102	RBLN-0062TAZZY	J	Ferrite Bead	AB
FB1103	RBLN-0062TAZZY	J	Ferrite Bead	AB
FB1104	RBLN-0062TAZZY	J	Ferrite Bead	AB
FB1105	RBLN-0062TAZZY	J	Ferrite Bead	AB
FB1106	RBLN-0062TAZZY	J	Ferrite Bead	AB

DUNTKC162DE01
R/C, LED Unit

INTEGRATED CIRCUIT

Ref. No.	Part No.	★	Description	Code
IC101	VHiTPS850++-1Y	J	TPS850	AG

TRANSISTORS

Ref. No.	Part No.	★	Description	Code
Q101	VS2SC2712Y/-1Y	J	2SC2712Y	AB
Q102	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q103	VS2SC2712Y/-1Y	J	2SC2712Y	AB
Q104	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q105	VS2SC2712Y/-1Y	J	2SC2712Y	AB
Q106	VS2SC2712Y/-1Y	J	2SC2712Y	AB

DIODES AND LED’S

Ref. No.	Part No.	★	Description	Code
D101	RH-EXA092WJZZY	J	Zener Diode	AB
D102	RH-PX0421CEZZY	J	Photo Diode, POWER INDICATOR	AD
D103	RH-PX0198TAZZY	J	Photo Diode, OPC INDICATOR	AC
D104	RH-PX0419CEZZY	J	Photo Diode, R/C INDICATOR	AC

CAPACITORS

Ref. No.	Part No.	★	Description	Code
C101	VCKYTV1CF225ZY	J	2.2 16V Ceramic	AB
C103	VCEASX1HN106MY	J	10 50V Electrolytic	AC
C104	VCKYCY1HF103ZY	J	0.01 50V Ceramic	AA
C105	VCKYCY1HB222KY	J	2200p 50V Ceramic	AA
C106	VCKYCY1HB222KY	J	2200p 50V Ceramic	AA

RESISTORS

Ref. No.	Part No.	★	Description	Code
R101	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R104	VRS-CY1JF393JY	J	39k 1/16W Metal Oxide	AA
R105	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R106	VRS-CY1JF471JY	J	470 1/16W Metal Oxide	AA
R107	VRS-CY1JF683JY	J	68k 1/16W Metal Oxide	AA
R109	VRS-CY1JF273FY	J	27k 1/16W Metal Oxide	AA
R110	VRS-CY1JF471JY	J	470 1/16W Metal Oxide	AA
R112	VRS-CY1JF273FY	J	27k 1/16W Metal Oxide	AA
R113	VRS-CY1JF332JY	J	3.3k 1/16W Metal Oxide	AA
R115	VRS-CY1JF273FY	J	27k 1/16W Metal Oxide	AA

MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
J101	QJAKJ0068CEZZ	J	Jack, Headphone	AG
P101	QPLGNA066WJZZ	J	Plug, 12pin (RA)	AD
RMC101	RRMCU0239CEZZ	J	Remote Receiver	AG
SLD1	PSLDM4646CEFW	J	Shield (Remote Receiver)	AD

DUNTKC163DE01
OPERATION Unit

DIODES

Ref. No.	Part No.	★	Description	Code
D131	RH-EXA092WJZZY	J	Zener Diode, 12V	AB
D132	RH-EXA092WJZZY	J	Zener Diode, 12V	AB

RESISTORS

Ref. No.	Part No.	★	Description	Code
R131	VRS-CY1JF822JY	J	8.2k 1/16W Metal Oxide	AA
R132	VRS-CY1JF822JY	J	8.2k 1/16W Metal Oxide	AA
R133	VRS-CY1JF123JY	J	12k 1/16W Metal Oxide	AA
R134	VRS-CY1JF123JY	J	12k 1/16W Metal Oxide	AA

SWITCHES

Ref. No.	Part No.	★	Description	Code
S131	QSW-K0108CEZZY	J	Switch, Vol (-)	AD
S132	QSW-K0108CEZZY	J	Switch, Vol (+)	AD
S133	QSW-K0108CEZZY	J	Switch, CH down	AD
S134	QSW-K0108CEZZY	J	Switch, CH up	AD
S135	QSW-K0108CEZZY	J	Switch, MENU	AD
S136	QSW-P0035GEZZ	J	Switch, MAIN POWER	AF
S137	QSW-K0108CEZZY	J	Switch, TV/VIDEO	AD

MISCELLANEOUS PART

Ref. No.	Part No.	★	Description	Code
P132	QPLGN0564TAZZY	J	Plug, 5pin (KA)	AC

DUNTKC164DE01
EXT-SP TERMINAL Unit

Ref. No.	Part No.	★	Description	Code
FB207	RBLN-0250TAZZY	J	Ferrite Bead	AC
FB208	RBLN-0250TAZZY	J	Ferrite Bead	AC
FB209	RBLN-0250TAZZY	J	Ferrite Bead	AC
FB210	RBLN-0250TAZZY	J	Ferrite Bead	AC
P202	QPLGNA058WJZZ	J	Plug, 4pin (SD)	AC
P203	QTANAA003WJZZ	J	Terminal, 4pin	AH

DUNTKC165DE01
SP-JACK Unit

Ref. No.	Part No.	★	Description	Code
FB202	RBLN-0250TAZZY	J	Ferrite Bead	AC
FB203	RBLN-0250TAZZY	J	Ferrite Bead	AC
FB204	RBLN-0250TAZZY	J	Ferrite Bead	AC
FB205	RBLN-0250TAZZY	J	Ferrite Bead	AC
J201	QJAKFA020WJZZ	J	Jack, 4pin	AE
P201	QPLGNA058WJZZ	J	Plug, 4pin (SD)	AC

DUNTKC166DE01
MAIN Unit

TUNER

NOTE: THE PARTS HERE SHOWN ARE SUPPIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

Ref. No.	Part No.	★	Description	Code
TU1101	VTUVT4T5FD532	J	VHF Tuner	BK

INTEGRATED CIRCUITS

Ref. No.	Part No.	★	Description	Code
IC401	VHiBA7046F/-1Y	J	BA7046F	AF
IC801	VHiVPC3230D1EQ	J	VPC3230D-QA-B3	BD
IC802	VHiPQ1CZ21H-1Y	J	PQ1CZ21H2ZP	AH
IC803	VHiBA033FP/-1Y	J	BA033FP-E2	AG
IC1601	VHiSDA5550M-1Y	J	SDA5550M-QB	AY
IC1602	RH-iXA134WJN5Q	J	MBM29DL400TC90	AQ
IC1603	VHi62S8308X-1Q	J	A62S8308X-70SI	AY
IC1604	VHiMM1501XN-1Y	J	MM1501XNRE	AE
IC1605	VHi7WH157FK-1Y	J	TC7WH157FK	AF
IC1606	VHiBA033FP/-1Y	J	BA033FP-E2	AG
IC1607	VHiPST9121N-1Y	J	IC-PST9121NR	AE
IC1608	VHiLVC157T+-1Y	J	SN74LVC157APWR	AF
IC1609	VHiLVC04AT+-1Y	J	SN74LVC04APWR	AE
IC1610	VHiBA05FP++-1Y	J	BA05FP-E2	AF
IC1611	VHiPST9128N-1Y	J	IC-PST9128NR	AE
IC1613	VHiBA025FP+-1Y	J	BA25BC0FP-E2	AG
IC1614	VHiTCVHC08T-1Y	J	TC74VHC08FT	AF
IC1615	VHi74LVX86T-1Y	J	TC74LVX86FT	AF
IC1616	VHiNC7SZ58P-1Y	J	NC7SZ58P6X	AE
IC1623	VHiBA7046F/-1Y	J	BA7046F	AF
IC1630	VHiNJM2584M-1Y	J	NJM2584M(TE1)	AG
IC2510	RH-iXA385WJZZQ	J	KZ4E101811WFP	AX
IC2511	VHiPST9128N-1Y	J	IC-PST9128NR	AE
IC2521	VHiCXA2040A-1Q	J	CXA2040AQ	AQ
IC2522	VHiMM1506XN-1Y	J	MM1506XNRE	AD
IC2523	VHiMM1506XN-1Y	J	MM1506XNRE	AD
IC2524	VHiMM1501XN-1Y	J	MM1501XNRE	AE
IC3202	RH-iXA416WJZZQ	J	MSP4450G-QA-B8	BC
IC3203	VHiBH3543F+-1Y	J	BH3543F-E2	AE
IC3208	VHiNJM2584M-1Y	J	NJM2584M(TE1)	AG
IC3209	VHiCD4052SJ-1Y	J	CD4052BCSJX	AD
IC3401	RH-iXA167WJZZY	J	PQ025EZ01ZZ	AL
IC3402	VHiTCHCT32F-1Y	J	TC74HCT32AF	AD
IC3403	VHiTC7SH08U-1Y	J	TC7SH08FU	AF
IC3405	VHiNJU26150-1Q	J	NJU26150FR1	AV
IC3406	VHiNJU26106-1Q	J	NJU26106FR1	AT
IC3407	RH-iXA707WJN1Y	J	AT24C64AN-10SI	AL
IC3408	VHiNJM4565M-1Y	J	NJM4565M	AE
IC3410	VHiBA05SFP+-1Y	J	BA05SFP-E2	AG
IC3411	VHiTC7SH08U-1Y	J	TC7SH08FU	AF
IC3412	VHiTC7SH08U-1Y	J	TC7SH08FU	AF
IC3501	RH-iXA799WJN1Q	J	M306V7FHFP	BG
IC3502	VHiPST529JM-1Y	J	PST529JMT	AE
IC3503	VHiBR2416E2-1Y	J	BR24C16F	AK
IC3504	VHiTC7W66U/-1Y	J	TC7W66FU	AE
IC3505	VHiBR24C32F-1Y	J	BR24C32F-E2	AH
IC3506	VHiTC7W66U/-1Y	J	TC7W66FU	AE
IC3510	VHiPQ20VZ11-1Y	J	PQ20VZ11	AG
IC3512	VHiBA033FP/-1Y	J	BA033FP-E2	AG
IC3513	VHiHHCT244F-1Y	J	HD74HCT244FPEL	AE
IC3642	VHiTC7W66U/-1Y	J	TC7W66FU	AE
IC3643	VHiTC7W66U/-1Y	J	TC7W66FU	AE
IC3645	VHiTC7W66U/-1Y	J	TC7W66FU	AE
IC3700	VHiNJM2377M-1Y	J	NJM2377M	AK
IC3701	VHiNJM2147M-1Y	J	NJM2147M-TE1	AF
IC3702	VHiPQ20WZ11-1Y	J	PQ20WZ1U	AF
IC4501	VHi74LVC74A-1Y	J	SN74LVC74APWR	AE
IC4502	VHi74LVC74A-1Y	J	SN74LVC74APWR	AE
IC4503	VHi74LVC74A-1Y	J	SN74LVC74APWR	AE
IC4504	VSSi4884DY+-1Y	J	SI4884DY-T1	AG
IC4505	VHiPQ1CZ21H-1Y	J	PQ1CZ21H2ZP	AH
IC4506	VHi74LVC2G4-1Y	J	SN74LVC2G04DCK	AD
IC4507	VHiLT1615ES-1Y	J	LT1615ES5	AP
IC4508	VHiLT1617ES-1Y	J	LT1617ES5	AP
IC4509	VHiLTC1872+-1Y	J	LTC1872ES6	AR
IC4510	VHiiCS570B+-1Y	J	ICS570BT	AQ

DUNTKC166DE01
MAIN Unit (Continued)

Ref. No.	Part No.	★	Description	Code
IC4511	VHiiCS570B+-1Y	J	ICS570BT	AQ
IC4512	RH-iXA595WJZZQ	J	LR38853	BC
IC4513	VHi25LC320+-1Y	J	25LC320-I/SN	AK
IC4514	VHi74LVC257-1Y	J	SN74LVC257APWR	AG
IC4515	VHiLM70CiMM-1Y	J	LM70CIMMX-3	AH
IC4516	RH-iXA312WJN1Q	J	MT48LC2M32B2TG	AX
IC4601	VHiFLi2310/-1Q	J	FLI2310	BH
IC4602	VHiPQ1CZ21H-1Y	J	PQ1CZ21H2ZP	AH
IC4603	RH-iXA312WJN1Q	J	MT48LC2M32B2TG	AX
IC4604	VHiPQ070XZ1-1Y	J	PQ070XZ01ZP	AF
IC4605	VHiTC7W74U/-1Y	J	TC7W74FU	AD
IC4701	RH-iXA706WJZZQ	J	IR3E12M1	AN
IC4702	VHiNJM4580V-1Y	J	NJM4580V	AE
IC4703	VHiPQ3DZ13U-1Y	J	PQ3DZ13U	AG
IC4706	VHiBH2220FM-1Y	J	BH2220FVM-TR	AG
IC4902	VHiPQ1CZ21H-1Y	J	PQ1CZ21H2ZP	AH

TRANSISTORS

Ref. No.	Part No.	★	Description	Code
Q402	VS2SA1530AR-1Y	J	2SA1530AR	AB
Q403	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q404	VS2SA1530AR-1Y	J	2SA1530AR	AB
Q1602	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q1606	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q1607	VS2SA1530AR-1Y	J	2SA1530AR	AB
Q1608	VSDTC144TE/-1Y	J	DTC144TE	AB
Q1612	VS2SA1530AR-1Y	J	2SA1530AR	AB
Q2200	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q2201	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q2202	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q2203	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3202	VSDTC114EE/-1Y	J	DTC114EE	AB
Q3401	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3402	VS2SA1530AR-1Y	J	2SA1530AR	AB
Q3403	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3404	VS2SA1530AR-1Y	J	2SA1530AR	AB
Q3405	VSDTC314TK/-1Y	J	DTC314TK	AC
Q3406	VSDTC314TK/-1Y	J	DTC314TK	AC
Q3407	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3501	VSDTC144EE/-1Y	J	DTC144EE	AA
Q3504	VS2SK536///-1Y	J	2SK536	AE
Q3505	VS2SK536///-1Y	J	2SK536	AE
Q3506	VSDTC144EE/-1Y	J	DTC144EE	AA
Q3507	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3508	VSDTC144EE/-1Y	J	DTC144EE	AA
Q3510	VSDTC144EE/-1Y	J	DTC144EE	AA
Q3641	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3700	VSDTC114YE/-1Y	J	DTC114YE	AB
Q3701	VSUPA606T//-1Y	J	UPA606T	AD
Q3702	VSUPA606T//-1Y	J	UPA606T	AD
Q3703	VSUPA606T//-1Y	J	UPA606T	AD
Q3705	VSUPA606T//-1Y	J	UPA606T	AD
Q3706	VS2SK2503//-1Y	J	2SK2503	AE
Q3707	VSDTC144EE/-1Y	J	DTC144EE	AA
Q3709	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3712	VSDTC114EKA-1Y	J	DTC114EKA	AB
Q3713	VS2SB1561//-1Y	J	2SB1561	AD
Q3714	VSDTC144EE/-1Y	J	DTC144EE	AA
Q3715	VS2SB1561//-1Y	J	2SB1561	AD
Q4501	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q4502	VSTP0610T++-1Y	J	TP0610T	AD
Q4503	VS2SK1826++-1Y	J	2SK1826	AC
Q4504	VS2SK1826++-1Y	J	2SK1826	AC
Q4505	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q4506	VS2SA1530AR-1Y	J	2SA1530AR	AB
Q4701	VS2SD1664R+-1Y	J	2SD1664R	AC
Q4702	VS2SD1664R+-1Y	J	2SD1664R	AC
Q4703	VS2SC3928AR-1Y	J	2SC3928AR	AB

DIODES AND LED’S

Ref. No.	Part No.	★	Description	Code
D801	VHDSFPB74//2EY	J	Diode	AD
D3201	RH-EX1315CEZZY	J	Zener Diode	AC
D3202	RH-EX1315CEZZY	J	Zener Diode	AC
D3204	VHDDAN222//-1Y	J	Diode	AA
D3207	VHDMA3120WA-1Y	J	Diode	AD
D3208	RH-EX1259CEZZY	J	Zener Diode, 8.2V	AB
D3211	RH-EX1264CEZZY	J	Zener Diode, 10V	AB
D3212	RH-EX1264CEZZY	J	Zener Diode, 10V	AB
D3213	RH-EX1264CEZZY	J	Zener Diode, 10V	AB
D3401	VHDHSU119//-1Y	J	Diode	AB
D3402	VHDHSU119//-1Y	J	Diode	AB
D3403	VHDHSU119//-1Y	J	Diode	AB
D3404	VHDHSU119//-1Y	J	Diode	AB
D3405	VHDHSU119//-1Y	J	Diode	AB
D3406	VHDHSU119//-1Y	J	Diode	AB
D3407	RH-PX0421CEZZY	J	PhotoDiode	AD
D3408	RH-PX0421CEZZY	J	PhotoDiode	AD
D3409	VHDDAN222//-1Y	J	Diode	AA
D3410	RH-EX1015GEZZY	J	Zener Diode, 16V	AD
D3411	RH-EX1015GEZZY	J	Zener Diode, 16V	AD
D3412	RH-EX1015GEZZY	J	Zener Diode, 16V	AD
D3413	RH-EX1015GEZZY	J	Zener Diode, 16V	AD
D3414	RH-EX1015GEZZY	J	Zener Diode, 16V	AD
D3415	RH-EX1015GEZZY	J	Zener Diode, 16V	AD
D3501	VHDDAN202K/-1Y	J	Diode	AB
D3502	RH-DX0061GEZZY	J	Diode	AD
D3503	VHDRB491D++-1Y	J	Diode	AD
D3505	RH-EX1249CEZZY	J	Zener Diode, 6.2V	AB
D3506	RH-EX1249CEZZY	J	Zener Diode, 6.2V	AB
D3507	RH-EX1396CEZZY	J	Zener Diode, 6.8V	AB
D3700	VHDiMN10///-1Y	J	Diode	AB
D3701	VHDiMN10///-1Y	J	Diode	AB
D3702	VHDiMN10///-1Y	J	Diode	AB
D3704	VHDSFPB56//2EY	J	Diode	AC
D3705	VHDDAN222//-1Y	J	Diode	AA
D3706	VHDiMN10///-1Y	J	Diode	AB
D3707	VHDiMN10///-1Y	J	Diode	AB
D3708	VHDiMN10///-1Y	J	Diode	AB
D3709	VHDSFPB74//2EY	J	Diode	AD
D3710	VHDSFPB74//2EY	J	Diode	AD
D3711	VHD1SS250//1EY	J	Diode	AB
D3712	VHDDAN222//-1Y	J	Diode	AA
D3713	VHDDAN222//-1Y	J	Diode	AA
D3715	VHDHSU119//-1Y	J	Diode	AB
D3716	RH-EX1243CEZZY	J	Zener Diode	AB
D3717	VHDHSU119//-1Y	J	Diode	AB
D3718	VHDDAN222//-1Y	J	Diode	AA
D4501	VHDHSU119//-1Y	J	Diode	AB
D4502	VHDHSU119//-1Y	J	Diode	AB
D4503	VHDSFPB74//2EY	J	Diode	AD
D4504	VHDSFPB54//2EY	J	Diode	AC
D4505	VHDSFPB54//2EY	J	Diode	AC
D4506	VHDSFPB74//2EY	J	Diode	AD
D4507	VHDHSU119//-1Y	J	Diode	AB
D4508	VHDHSU119//-1Y	J	Diode	AB
D4509	VHDHSU119//-1Y	J	Diode	AB
D4601	VHDSFPB54//2EY	J	Diode	AC
D4602	VHDDAN202K/-1Y	J	Diode	AB
D4701	VHDSC8024//-1Y	J	Diode	AC
D4702	VHDDAN222//-1Y	J	Diode	AA
D4703	VHDSC8024//-1Y	J	Diode	AC
D4704	VHDHSU119//-1Y	J	Diode	AB
D4901	VHDSFPB54//2EY	J	Diode	AC

PACKAGED CIRCUITS

Ref. No.	Part No.	★	Description	Code
X801	RCRSC0012CEZZY	J	Crystal	AH
X1601	RCRSB0202GEZZ+	J	Crystal	AG
X3201	RCRSB0307CEZZ	J	Crystal	AG
X3401	RCRSAA045WJZZ	J	Crystal	AG
X3402	RCRSAA045WJZZ	J	Crystal	AG
X4601	RCRSC0193TAZZY	J	Crystal	AH

FILTERS

Ref. No.	Part No.	★	Description	Code
CF3501	RFiLZ0169TAZZY	J	Filter	AD
FL401	RFiLCA002WJZZY	J	Filter	AG
FL3401	RFiLN0097GEZZY	J	Filter	AF
FL3402	RFiLN0097GEZZY	J	Filter	AF
FL3403	RFiLN0097GEZZY	J	Filter	AF

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Ref. No.	Part No.	★	Description	Code
FL3701	RFiLN0097GEZZY	J	Filter	AF
FL4501	RFiLNA002WJZZY	J	Filter	AD
FL4502	RFiLNA002WJZZY	J	Filter	AD
FL4503	RFiLNA027WJZZY	J	Filter	AD
FL4504	RFiLN0097GEZZY	J	Filter	AF
FL4505	RFiLNA025WJZZY	J	Filter	AC
FL4506	RFiLNA021WJZZY	J	Filter	AE
FL4507	RFiLNA021WJZZY	J	Filter	AE
FL4508	RFiLNA021WJZZY	J	Filter	AE
FL4509	RFiLNA021WJZZY	J	Filter	AE
FL4510	RFiLNA021WJZZY	J	Filter	AE
FL4511	RFiLNA021WJZZY	J	Filter	AE
FL4512	RFiLNA021WJZZY	J	Filter	AE
FL4513	RFiLNA021WJZZY	J	Filter	AE
FL4514	RFiLNA021WJZZY	J	Filter	AE
FL4515	RFiLNA021WJZZY	J	Filter	AE
FL4516	RFiLNA021WJZZY	J	Filter	AE
FL4517	RFiLNA021WJZZY	J	Filter	AE
FL4520	RFiLNA074WJZZY	J	Filter	AD
FL4521	RFiLNA074WJZZY	J	Filter	AD
FL4523	RFiLNA029WJZZY	J	Filter	AD
FL4524	RFiLN0097GEZZY	J	Filter	AF
FL4601	RFiLNA029WJZZY	J	Filter	AD
FL4603	RFiLN0097GEZZY	J	Filter	AF
FL4604	RFiLN0097GEZZY	J	Filter	AF
FL4605	RFiLN0097GEZZY	J	Filter	AF
FL4901	RFiLNA002WJZZY	J	Filter	AD
FL4902	RFiLNA002WJZZY	J	Filter	AD

COILS

Ref. No.	Part No.	★	Description	Code
L804	RCiLCA060WJZZY	J	Coil	AD
L805	RCiLP0301TAZZY	J	Coil	AF
L806	RCiLCA060WJZZY	J	Coil	AD
L807	RCiLP0303TAZZY	J	Coil	AG
L1601	VPCNN270J3R8NY	J	Peaking 27µH	AB
L2200	VPCNN4R7J1R2NY	J	Peaking 4.7µH	AB
L2201	VPCNN2R7JR85NY	J	Peaking 2.7µH	AB
L2202	VPCNN4R7J1R2NY	J	Peaking 4.7µH	AB
L2203	VPCNN3R3JR93NY	J	Peaking 3.3µH	AB
L2204	VPCNN5R6J1R2NY	J	Peaking 5.6µH	AB
L2205	VPCNN5R6J1R2NY	J	Peaking 5.6µH	AB
L2206	VPCNN4R7J1R2NY	J	Peaking 4.7µH	AB
L2207	VPCNN2R7JR85NY	J	Peaking 2.7µH	AB
L2208	VPCNN4R7J1R2NY	J	Peaking 4.7µH	AB
L2209	VPCNN100J1R6NY	J	Peaking 10µH	AB
L2501	VPD9M100J1R7NY	J	Peaking 10µH	AC
L2502	VPCNN101J7R7NY	J	Peaking 100µH	AB
L3201	VPCNN101J7R7NY	J	Peaking 100µH	AB
L3202	VPCNN4R7J1R2NY	J	Peaking 4.7µH	AB
L3204	VPCNN101J7R7NY	J	Peaking 100µH	AB
L3205	VPD9M100J1R7NY	J	Peaking 10µH	AC
L3206	VPCNN101J7R7NY	J	Peaking 100µH	AB
L3700	RCiLPA026WJZZ	J	Coil	AD
L3701	RCiLCA060WJZZY	J	Coil	AD
L3703	RCiLPA026WJZZ	J	Coil	AD
L3704	RCiLP0343TAZZY	J	Coil	AD
L4501	VPD9M4R7J1R4NY	J	Peaking 4.7µH	AB
L4502	RCiLP0270TAZZY	J	Coil	AD
L4503	VPD9M4R7J1R4NY	J	Peaking 4.7µH	AB
L4504	VPBWM220K1R2NY	J	Peaking 22µH	AC
L4505	RCiLP0343TAZZY	J	Coil	AD
L4506	RCiLP0301TAZZY	J	Coil	AF
L4507	VPBWM100KR50NY	J	Peaking 10µH	AC
L4508	VPBWM220K1R2NY	J	Peaking 22µH	AC
L4509	RCiLP0343TAZZY	J	Coil	AD
L4510	RCiLP0343TAZZY	J	Coil	AD
L4601	RCiLP0304TAZZY	J	Coil	AE
L4602	RCiLP0343TAZZY	J	Coil	AD
L4901	RCiLP0305TAZZY	J	Coil	AE
L4902	RCiLP0343TAZZY	J	Coil	AD
L7008	VPCNN100J1R6NY	J	Peaking 10µH	AB

TRANSFORMER

Ref. No.	Part No.	★	Description	Code
T3700	RTRNWA006WJZZY	J	Transformer	AM

CONTROLS

Ref. No.	Part No.	★	Description	Code
R3717	RVR-M0111CEZZY	J	Variable Resistor 1k	AC
R4525	RVR-M0116CEZZY	J	Variable Resistor	AC

CAPACITORS

Ref. No.	Part No.	★	Description			Code
C402	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C403	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C404	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C405	VCKYCY1HB222KY	J	2200p	50V	Ceramic	AA
C406	VCEASW0JN476MY	J	47	6.3V	Electrolytic	AC
C407	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C408	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C409	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C410	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C411	VCKYTV1AB105KY	J	1	10V	Ceramic	AC
C412	VCKYCY1AB105KY	J	1	10V	Ceramic	AB
C413	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C414	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C415	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C803	VCKYTV1CB224KY	J	0.22	16V	Ceramic	AB
C804	VCEASW0JN107MY	J	100	6.3V	Electrolytic	AC
C806	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C807	VCKYTV1CF684ZY	J	0.68	16V	Ceramic	AB
C808	VCEASW0JN107MY	J	100	6.3V	Electrolytic	AC
C809	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C810	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C811	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C812	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C813	VCEASW0JN107MY	J	100	6.3V	Electrolytic	AC
C814	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C815	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C816	VCCCCY1HH7R0DY	J	7p	50V	Ceramic	AA
C817	VCKYCY1AB224KY	J	0.22	10V	Ceramic	AB
C818	VCKYCY1AB224KY	J	0.22	10V	Ceramic	AB
C819	VCCCCY1HH7R0DY	J	7p	50V	Ceramic	AA
C820	VCKYCY1AB224KY	J	0.22	10V	Ceramic	AB
C821	VCCCCY1HH470JY	J	47p	50V	Ceramic	AA
C822	VCCCCY1HH470JY	J	47p	50V	Ceramic	AA
C823	VCCCCY1HH470JY	J	47p	50V	Ceramic	AA
C827	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C828	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C829	VCEASW1CN227MY	J	220	16V	Electrolytic	AC
C830	VCEASW0JN337MY	J	330	6.3V	Electrolytic	AC
C831	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C832	RC-KZ0070TAZZY	J	1	10V	Ceramic	AD
C833	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C834	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C835	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C836	VCEASW0JN227MY	J	220	6.3V	Electrolytic	AC
C837	VCKYCY1CF334ZY	J	0.33	16V	Ceramic	AB
C838	VCEASW0JN227MY	J	220	6.3V	Electrolytic	AC
C839	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C840	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C841	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C842	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C843	VCEASX1CN107MY	J	100	16V	Electrolytic	AC
C1601	VCEASX0JN107MY	J	100	6.3V	Electrolytic	AC
C1602	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1603	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1604	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C1605	VCE9PV0JN226MY	J	22	6.3V	Elect. (N.P)	AD
C1606	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C1607	VCEASW1CN226MY	J	22	16V	Electrolytic	AC
C1608	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C1609	VCKYCY1CF334ZY	J	0.33	16V	Ceramic	AB
C1610	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1611	VCEASX1CN476MY	J	47	16V	Electrolytic	AC
C1612	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C1614	VCEASX1CN107MY	J	100	16V	Electrolytic	AC
C1616	VCCCCY1HH181JY	J	180p	50V	Ceramic	AA
C1617	VCEASX1CN226MY	J	22	16V	Electrolytic	AC
C1618	VCEASX1CN476MY	J	47	16V	Electrolytic	AC

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Ref. No.	Part No.	★	Description			Code
C1619	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1621	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1622	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1623	VCE9PV0JN226MY	J	22	6.3V	Elect. (N.P)	AD
C1624	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1625	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1626	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1627	VCKYTV1CF105ZY	J	1	16V	Ceramic	AB
C1628	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1629	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C1630	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1631	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1633	VCCCCY1HH330JY	J	33p	50V	Ceramic	AA
C1634	VCCCCY1HH330JY	J	33p	50V	Ceramic	AA
C1635	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1637	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1638	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1639	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1642	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1644	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1646	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1647	VCKYCY1CF334ZY	J	0.33	16V	Ceramic	AB
C1648	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1649	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1650	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1660	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1661	VCEASX1CN107MY	J	100	16V	Electrolytic	AC
C1662	VCEASX1CN107MY	J	100	16V	Electrolytic	AC
C1666	VCCCCY1HH561JY	J	560p	50V	Ceramic	AB
C1667	VCCCCY1HH561JY	J	560p	50V	Ceramic	AB
C1668	VCCCCY1HH561JY	J	560p	50V	Ceramic	AB
C1674	VCEASX1CN476MY	J	47	16V	Electrolytic	AC
C1675	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1676	VCKYTV1AB105KY	J	1	10V	Ceramic	AC
C1677	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C1678	VCKYCY1HB222KY	J	2200p	50V	Ceramic	AA
C1679	VCKYTV1AB105KY	J	1	10V	Ceramic	AC
C1680	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C1681	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C1682	VCEASX0JN107MY	J	100	6.3V	Electrolytic	AC
C1683	VCEASX0JN107MY	J	100	6.3V	Electrolytic	AC
C1684	VCE9PV1CN106MY	J	10	16V	Elect. (N.P)	AD
C1685	VCE9PV1CN106MY	J	10	16V	Elect. (N.P)	AD
C1686	VCE9PV1CN106MY	J	10	16V	Elect. (N.P)	AD
C1687	VCE9PV1CN106MY	J	10	16V	Elect. (N.P)	AD
C1688	VCE9PV1CN106MY	J	10	16V	Elect. (N.P)	AD
C1689	VCE9PV1CN106MY	J	10	16V	Elect. (N.P)	AD
C1690	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C1691	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C2201	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C2202	VCCCCY1HH560JY	J	56p	50V	Ceramic	AB
C2203	VCCCCY1HH560JY	J	56p	50V	Ceramic	AB
C2204	VCCCCY1HH271JY	J	270p	50V	Ceramic	AA
C2205	VCCCCY1HH121JY	J	120p	50V	Ceramic	AA
C2206	VCCCCY1HH680JY	J	68p	50V	Ceramic	AA
C2207	VCCCCY1HH680JY	J	68p	50V	Ceramic	AA
C2208	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C2209	VCCCCY1HH121JY	J	120p	50V	Ceramic	AA
C2210	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C2211	VCEASX1CN476MY	J	47	16V	Electrolytic	AC
C2213	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2214	VCCCCY1HH331JY	J	330p	50V	Ceramic	AA
C2548	VCCCCY1HH220JY	J	22p	50V	Ceramic	AA
C2549	VCEASW1CN337MY	J	330	16V	Electrolytic	AD
C2550	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2560	VCEASX1CN107MY	J	100	16V	Electrolytic	AC
C2561	VCEASX1CN107MY	J	100	16V	Electrolytic	AC
C2562	VCAAPC1AJ336MY	J	33	10V	Electrolytic	AG
C2563	VCEASX1CN477MY	J	470	16V	Electrolytic	AD
C2564	VCAAPC0JJ336MY	J	33	6.3V	Electrolytic	AF
C2565	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2566	VCE9PV1CN106MY	J	10	16V	Elect. (N.P)	AD
C2567	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2568	VCEASW0JN477MY	J	470	6.3V	Electrolytic	AD
C2569	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2570	VCE9PV1CN106MY	J	10	16V	Elect. (N.P)	AD
C2571	VCAAPC0JJ336MY	J	33	6.3V	Electrolytic	AF
C2572	VCEASX1CN477MY	J	470	16V	Electrolytic	AD
C2573	VCE9PV1CN106MY	J	10	16V	Elect. (N.P)	AD
C2580	VCCCCY1HH5R0CY	J	5p	50V	Ceramic	AA
C2582	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C2583	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C2584	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C2585	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C2587	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C2588	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C2589	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C2590	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C2591	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C2592	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2593	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2594	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2595	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C2596	VCE9PV1CN106MY	J	10	16V	Elect. (N.P)	AD
C2597	VCE9PV1CN106MY	J	10	16V	Elect. (N.P)	AD
C3202	VCEASX0JN107MY	J	100	6.3V	Electrolytic	AC
C3203	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C3204	VCCCCY1HH560JY	J	56p	50V	Ceramic	AB
C3205	VCCCCY1HH4R0CY	J	4p	50V	Ceramic	AA
C3206	VCCCCY1HH4R0CY	J	4p	50V	Ceramic	AA
C3207	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C3208	VCCCCY1HH560JY	J	56p	50V	Ceramic	AB
C3209	VCCCCY1HH560JY	J	56p	50V	Ceramic	AB
C3210	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3211	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3212	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C3213	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C3214	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3215	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C3216	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C3217	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3218	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C3219	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3221	VCEASX0JN107MY	J	100	6.3V	Electrolytic	AC
C3222	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C3225	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C3226	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C3227	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C3228	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C3229	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3230	VCEASX1HN335MY	J	3.3	50V	Electrolytic	AB
C3231	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C3232	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3233	VCEASX1CN107MY	J	100	16V	Electrolytic	AC
C3234	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C3235	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C3236	VCKYCY1HB222KY	J	2200p	50V	Ceramic	AA
C3237	VCKYCY1HB222KY	J	2200p	50V	Ceramic	AA
C3238	VCEASX1HN225MY	J	2.2	50V	Electrolytic	AB
C3240	VCEASX0JN227MY	J	220	6.3V	Electrolytic	AC
C3241	VCEASX0JN227MY	J	220	6.3V	Electrolytic	AC
C3243	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3245	VCEASX1HN225MY	J	2.2	50V	Electrolytic	AB
C3248	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C3249	VCEASX1HN225MY	J	2.2	50V	Electrolytic	AB
C3253	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C3256	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C3257	VCE9PV1HN225MY	J	2.2	50V	Elect. (N.P)	AC
C3262	VCE9PV1HN225MY	J	2.2	50V	Elect. (N.P)	AC
C3289	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3290	VCEASX1CN107MY	J	100	16V	Electrolytic	AC
C3291	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3292	VCEASX1CN107MY	J	100	16V	Electrolytic	AC
C3293	VCEASX1CN107MY	J	100	16V	Electrolytic	AC
C3294	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3295	VCE9PV1CN106MY	J	10	16V	Elect. (N.P)	AD
C3296	VCE9PV1CN106MY	J	10	16V	Elect. (N.P)	AD
C3297	VCE9PV1CN106MY	J	10	16V	Elect. (N.P)	AD

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MAIN Unit (Continued)

Ref. No.	Part No.	★	Description			Code
C3298	VCE9PV1CN106MY	J	10	16V	Elect. (N.P)	AD
C3299	VCE9PV1CN106MY	J	10	16V	Elect. (N.P)	AD
C3300	VCE9PV1CN106MY	J	10	16V	Elect. (N.P)	AD
C3401	VCEASW1CN107MY	J	100	16V	Electrolytic	AC
C3402	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3403	VCEASW1CN107MY	J	100	16V	Electrolytic	AC
C3404	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3405	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3406	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3407	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3408	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3409	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3410	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3411	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C3412	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3413	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C3414	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3415	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3416	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3417	VCCCCY1HH3R0CY	J	3p	50V	Ceramic	AA
C3418	VCCCCY1HH3R0CY	J	3p	50V	Ceramic	AA
C3419	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C3420	VCEASX1HN225MY	J	2.2	50V	Electrolytic	AB
C3421	VCEASX1HN225MY	J	2.2	50V	Electrolytic	AB
C3422	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C3423	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C3424	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3425	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C3426	VCEASX1CN476MY	J	47	16V	Electrolytic	AC
C3427	VCEASX1CN107MY	J	100	16V	Electrolytic	AC
C3428	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3429	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C3430	VCEASW1HN226MY	J	22	50V	Electrolytic	AC
C3433	VCEASX1HN225MY	J	2.2	50V	Electrolytic	AB
C3434	VCEASX1HN225MY	J	2.2	50V	Electrolytic	AB
C3436	VCEASW0JN227MY	J	220	6.3V	Electrolytic	AC
C3437	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C3438	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C3439	VCEASX1HN225MY	J	2.2	50V	Electrolytic	AB
C3440	VCEASX1HN225MY	J	2.2	50V	Electrolytic	AB
C3441	VCEASX1CN106MY	J	10	16V	Electrolytic	AC
C3442	RC-KZ0117TAZZY	J	47	6.3V	Ceramic	AD
C3443	VCEASX1CN107MY	J	100	16V	Electrolytic	AC
C3444	VCCCCY1HH151JY	J	150p	50V	Ceramic	AA
C3445	VCCCCY1HH151JY	J	150p	50V	Ceramic	AA
C3446	VCEASX0JN227MY	J	220	6.3V	Electrolytic	AC
C3447	VCCCCY1HH151JY	J	150p	50V	Ceramic	AA
C3449	VCCCCY1HH151JY	J	150p	50V	Ceramic	AA
C3451	VCCCCY1HH151JY	J	150p	50V	Ceramic	AA
C3452	VCKYCY1EB223KY	J	0.022	25V	Ceramic	AA
C3453	VCKYCY1EB223KY	J	0.022	25V	Ceramic	AA
C3455	VCCCCY1HH151JY	J	150p	50V	Ceramic	AA
C3456	VCKYCY1EB223KY	J	0.022	25V	Ceramic	AA
C3457	VCKYCY1EB223KY	J	0.022	25V	Ceramic	AA
C3458	VCKYCY1CF224ZY	J	0.22	16V	Ceramic	AB
C3459	VCKYCY1CF224ZY	J	0.22	16V	Ceramic	AB
C3460	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C3461	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C3462	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3463	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3464	VCEASW0JN476MY	J	47	6.3V	Electrolytic	AC
C3465	VCEASW0JN476MY	J	47	6.3V	Electrolytic	AC
C3466	RC-EZA010WJZZ	J	1000	16V	Electrolytic	AD
C3467	RC-EZA010WJZZ	J	1000	16V	Electrolytic	AD
C3468	RC-EZA010WJZZ	J	1000	16V	Electrolytic	AD
C3469	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3470	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3500	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3501	VCKYTV1CF105ZY	J	1	16V	Ceramic	AB
C3502	VCEASX1CN226MY	J	22	16V	Electrolytic	AC
C3503	VCKYTV1CF105ZY	J	1	16V	Ceramic	AB
C3505	VCKYCY1CF334ZY	J	0.33	16V	Ceramic	AB
C3506	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C3508	VCEASX1CN107MY	J	100	16V	Electrolytic	AC
C3509	VCKYCY1HF103ZY	J	0.01	50V	Ceramic	AA
C3510	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3511	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C3515	VCEASX0JN476MY	J	47	6.3V	Electrolytic	AC
C3516	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C3519	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3520	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C3521	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C3522	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C3524	VCKYTV1CF105ZY	J	1	16V	Ceramic	AB
C3525	VCEASX1CN226MY	J	22	16V	Electrolytic	AC
C3526	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3527	VCKYCY1HF103ZY	J	0.01	50V	Ceramic	AA
C3528	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C3529	VCKYCY1HF103ZY	J	0.01	50V	Ceramic	AA
C3532	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C3533	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C3534	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3535	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3536	VCKYCY1HB222KY	J	2200p	50V	Ceramic	AA
C3537	VCKYCY1HB222KY	J	2200p	50V	Ceramic	AA
C3642	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C3643	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C3645	VCKYCY1HB104KY	J	0.1	50V	Ceramic	AA
C3700	VCKYTV1EB474KY	J	0.47	25V	Ceramic	AC
C3701	VCKYTV1EB474KY	J	0.47	25V	Ceramic	AC
C3702	VCKYTV1EB474KY	J	0.47	25V	Ceramic	AC
C3703	VCKYTV1EB474KY	J	0.47	25V	Ceramic	AC
C3704	VCKYTV1EB474KY	J	0.47	25V	Ceramic	AC
C3705	VCKYTV1EB474KY	J	0.47	25V	Ceramic	AC
C3706	VCKYTV1EB474KY	J	0.47	25V	Ceramic	AC
C3708	VCKYTV1EB474KY	J	0.47	25V	Ceramic	AC
C3709	RC-KZ1025CEZZY	J	1	10V	Ceramic	AB
C3711	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C3713	VCEASX1VN475MY	J	4.7	35V	Electrolytic	AB
C3714	VCEASW1CN226MY	J	22	16V	Electrolytic	AC
C3715	VCCCCY1HH471JY	J	470p	50V	Ceramic	AA
C3716	VCEASW1CN337MY	J	330	16V	Electrolytic	AD
C3717	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3718	VCKYCY1HB562KY	J	5600p	50V	Ceramic	AA
C3719	VCAAPF1CJ187MY	J	180	16V	Electrolytic	AH
C3720	VCKYCY1HB562KY	J	5600p	50V	Ceramic	AA
C3721	VCCCCY1HH181JY	J	180p	50V	Ceramic	AA
C3724	VCEASW1HN476MY	J	47	50V	Electrolytic	AD
C3725	VCEASW1CN337MY	J	330	16V	Electrolytic	AD
C3726	VCKYTV1CF105ZY	J	1	16V	Ceramic	AB
C3727	VCEASW1CN337MY	J	330	16V	Electrolytic	AD
C3730	VCKYTV1HF104ZY	J	0.1	50V	Ceramic	AB
C3731	VCKYTV1CF105ZY	J	1	16V	Ceramic	AB
C3732	VCAAPF0JJ227MY	J	220	6.3V	Electrolytic	AG
C3733	VCKYTV1CF105ZY	J	1	16V	Ceramic	AB
C3734	VCEASX1HN225MY	J	2.2	50V	Electrolytic	AB
C3735	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C3736	VCAAPF1CJ396MY	J	39	16V	Electrolytic	AF
C3738	VCEASW0JN337MY	J	330	6.3V	Electrolytic	AC
C3739	VCKYTV1CF105ZY	J	1	16V	Ceramic	AB
C3740	VCEASW1EN107MY	J	100	25V	Electrolytic	AC
C3741	VCEASW1CN337MY	J	330	16V	Electrolytic	AD
C3742	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4501	VCKYCY1HF104ZY	J	0.1	50V	Ceramic	AA
C4502	VCEASW1EN476MY	J	47	25V	Electrolytic	AC
C4503	VCEASW0JN476MY	J	47	6.3V	Electrolytic	AC
C4504	VCKYCY1HF104ZY	J	0.1	50V	Ceramic	AA
C4505	RC-KZA047WJZZY	J	1	50V	Ceramic	AC
C4506	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4507	RC-KZ0070TAZZY	J	4.7	16V	Ceramic	AD
C4508	VCEASW1EN476MY	J	47	25V	Electrolytic	AC
C4509	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C4510	VCEASW1CN107MY	J	100	16V	Electrolytic	AC
C4511	VCEASW1HN336MY	J	33	50V	Electrolytic	AC
C4512	RC-KZ0070TAZZY	J	4.7	16V	Ceramic	AD
C4513	RC-KZ0070TAZZY	J	4.7	16V	Ceramic	AD
C4514	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C4515	VCEASW1CN227MY	J	220	16V	Electrolytic	AC

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MAIN Unit (Continued)

Ref. No.	Part No.	★	Description			Code
C4516	RC-KZA047WJZZY	J	1	50V	Ceramic	AC
C4517	VCCCCY1HH5R0CY	J	5p	50V	Ceramic	AA
C4518	VCKYCY1CF224ZY	J	0.22	16V	Ceramic	AB
C4519	VCEASW1EN476MY	J	47	25V	Electrolytic	AC
C4520	VCEASW1CN337MY	J	330	16V	Electrolytic	AD
C4521	VCCCCY1HH220JY	J	22p	50V	Ceramic	AA
C4522	VCCCCY1HH681JY	J	680p	50V	Ceramic	AB
C4523	VCCCCY1HH101JY	J	100p	50V	Ceramic	AA
C4524	RC-KZ0070TAZZY	J	4.7	16V	Ceramic	AD
C4525	RC-KZ0070TAZZY	J	4.7	16V	Ceramic	AD
C4526	VCAAPD1AJ157MY	J	150	10V	Electrolytic	AF
C4527	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4528	VCKYTV1CF105ZY	J	1	16V	Ceramic	AB
C4529	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C4530	VCKYTV1CF105ZY	J	1	16V	Ceramic	AB
C4531	VCEASX0JN227MY	J	220	6.3V	Electrolytic	AC
C4532	VCKYTV1CF105ZY	J	1	16V	Ceramic	AB
C4533	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4534	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C4535	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C4536	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C4537	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4538	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C4539	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C4540	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C4541	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C4542	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4543	VCKYTV1CF105ZY	J	1	16V	Ceramic	AB
C4544	VCEASX0JN107MY	J	100	6.3V	Electrolytic	AC
C4545	VCEASX0JN107MY	J	100	6.3V	Electrolytic	AC
C4546	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C4547	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C4548	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C4549	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C4550	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C4551	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C4552	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C4553	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C4554	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C4555	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C4556	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C4557	VCEASW1CN226MY	J	22	16V	Electrolytic	AC
C4558	VCKYCY1HB102KY	J	1000p	50V	Ceramic	AA
C4559	VCKYCY1HB103KY	J	0.01	50V	Ceramic	AA
C4560	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4561	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4562	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4563	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C4564	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4565	VCEASW1CN107MY	J	100	16V	Electrolytic	AC
C4566	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C4567	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C4568	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C4569	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C4571	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C4572	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C4573	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C4601	RC-KZ0074TAZZY	J	10	6.3V	Ceramic	AF
C4602	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4603	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4604	VCCCCY1HH330JY	J	33p	50V	Ceramic	AA
C4605	VCCCCY1HH330JY	J	33p	50V	Ceramic	AA
C4606	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4607	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C4608	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C4609	VCEASW0JN227MY	J	220	6.3V	Electrolytic	AC
C4610	VCEASW0JN476MY	J	47	6.3V	Electrolytic	AC
C4611	RC-KZ0074TAZZY	J	10	6.3	Ceramic	AF
C4612	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C4613	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C4614	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C4615	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C4616	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C4617	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C4618	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C4619	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C4620	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C4621	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C4622	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C4623	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C4624	VCEASW0JN227MY	J	220	6.3V	Electrolytic	AC
C4625	VCEASW0JN476MY	J	47	6.3V	Electrolytic	AC
C4626	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C4627	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C4628	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C4629	RC-KZ0074TAZZY	J	10	6.3V	Ceramic	AF
C4630	VCEASW1CN107MY	J	100	16V	Electrolytic	AC
C4631	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C4632	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C4633	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C4634	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C4635	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C4636	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C4637	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4638	VCEASX0JN107MY	J	100	6.3V	Electrolytic	AC
C4639	VCEASW0JN337MY	J	330	6.3V	Electrolytic	AC
C4640	VCEASX0JN107MY	J	100	6.3V	Electrolytic	AC
C4641	VCEASW1CN107MY	J	100	16V	Electrolytic	AC
C4642	VCKYTV1CB105KY	J	1	16V	Ceramic	AC
C4643	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C4644	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C4645	VCKYCY1CB104KY	J	0.1	16V	Ceramic	AB
C4646	VCKYCY1EB103KY	J	0.01	25V	Ceramic	AA
C4647	VCEASW0JN227MY	J	220	6.3V	Electrolytic	AC
C4648	VCKYTV1CB105KY	J	1	16V	Ceramic	AC
C4649	VCCCCY1HH180JY	J	18p	50V	Ceramic	AA
C4651	VCKYCY1HF103ZY	J	0.01	50V	Ceramic	AA
C4700	RC-KZ0070TAZZY	J	4.7	16V	Ceramic	AD
C4701	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4702	RC-KZ0070TAZZY	J	4.7	16V	Ceramic	AD
C4703	VCCCCY1HH680JY	J	68p	50V	Ceramic	AA
C4706	VCEASW1CN107MY	J	100	16V	Electrolytic	AC
C4708	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4709	VCEASW0JN227MY	J	220	6.3V	Electrolytic	AC
C4710	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4711	RC-KZ0070TAZZY	J	4.7	16V	Ceramic	AD
C4712	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4713	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4714	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4715	VCKYTV1CB105KY	J	1	16V	Ceramic	AC
C4716	VCKYTV1CB105KY	J	1	16V	Ceramic	AC
C4717	VCKYTV1CB105KY	J	1	16V	Ceramic	AC
C4718	VCKYTV1CB105KY	J	1	16V	Ceramic	AC
C4719	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4720	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4721	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4724	VCCCCY1HH680JY	J	68p	50V	Ceramic	AA
C4725	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4727	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4728	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4729	VCKYTV1CB105KY	J	1	16V	Ceramic	AC
C4730	VCKYTV1CB105KY	J	1	16V	Ceramic	AC
C4731	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4732	VCKYTV1CB105KY	J	1	16V	Ceramic	AC
C4733	VCKYTV1CB105KY	J	1	16V	Ceramic	AC
C4734	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4735	VCKYTV1CB105KY	J	1	16V	Ceramic	AC
C4736	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4737	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4738	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4739	VCKYTV1CB105KY	J	1	16V	Ceramic	AC
C4740	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4741	VCKYTV1CB105KY	J	1	16V	Ceramic	AC
C4742	VCKYTV1CB105KY	J	1	16V	Ceramic	AC
C4743	VCKYTV1CB105KY	J	1	16V	Ceramic	AC
C4744	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA
C4745	VCKYTV1CB105KY	J	1	16V	Ceramic	AC
C4746	VCKYCY1EF104ZY	J	0.1	25V	Ceramic	AA

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MAIN Unit (Continued)

Ref. No.	Part No.	★	Description	Code
C4747	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C4748	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C4749	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C4750	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C4751	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C4752	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C4753	VCKYTV1CB105KY	J	1 16V Ceramic	AC
C4754	VCKYTV1CB105KY	J	1 16V Ceramic	AC
C4755	VCKYTV1CB105KY	J	1 16V Ceramic	AC
C4756	VCKYTV1CB105KY	J	1 16V Ceramic	AC
C4757	VCAAPE0JJ107MY	J	100 6.3V Electrolytic	AE
C4758	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C4903	VCEASW1CN107MY	J	100 16V Electrolytic	AC
C4905	VCEASW0JN337MY	J	330 6.3V Electrolytic	AC
C4906	VCEASW0JN107MY	J	100 6.3V Electrolytic	AC
C4908	VCKYCY1EB103KY	J	0.01 25V Ceramic	AA
C4909	VCAAPD0JJ127MY	J	120 6.3V Electrolytic	AF
C4910	VCEASW1EN476MY	J	47 25V Electrolytic	AC
C4911	VCKYCY1EB103KY	J	0.01 25V Ceramic	AA

RESISTORS

Ref. No.	Part No.	★	Description	Code
R401	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R402	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R405	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R406	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R407	VRS-CY1JF474JY	J	470k 1/16W Metal Oxide	AA
R408	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R409	VRS-CY1JF333FY	J	33k 1/16W Metal Oxide	AA
R410	VRS-CY1JF152JY	J	1.5k 1/16W Metal Oxide	AA
R411	VRS-CY1JF561FY	J	560 1/16W Metal Oxide	AA
R412	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R413	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R414	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R415	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R416	VRS-CY1JF681FY	J	680 1/16W Metal Oxide	AA
R417	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R418	VRS-CY1JF122JY	J	1.2k 1/16W Metal Oxide	AA
R419	VRS-CY1JF471JY	J	470 1/16W Metal Oxide	AA
R420	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R421	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R809	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R810	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R812	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R813	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R815	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R816	VRS-CY1JF472FY	J	4.7k 1/16W Metal Oxide	AA
R817	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R818	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R819	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R820	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R821	VRS-CY1JF302FY	J	3k 1/16W Metal Oxide	AA
R822	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R824	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R825	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R826	VRS-TQ2BD000JY	J	0 1/8W Metal Oxide	AA
R827	VRS-CA1JF101JY	J	100 1/16W Metal Oxide	AA
R828	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R829	VRS-CY1JF101FY	J	100 1/16W Metal Oxide	AD
R831	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R833	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R835	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R837	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R838	VRS-TQ2BD000JY	J	0 1/8W Metal Oxide	AA
R842	VRS-CY1JF680JY	J	68 1/16W Metal Oxide	AA
R843	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1602	VRS-CY1JF202JY	J	2k 1/16W Metal Oxide	AA
R1603	VRS-CY1JF202JY	J	2k 1/16W Metal Oxide	AA
R1605	VRS-CY1JF332JY	J	3.3k 1/16W Metal Oxide	AA
R1609	VRS-CY1JF681JY	J	680 1/16W Metal Oxide	AA
R1610	VRS-TW2ED240JY	J	24 1/4W Metal Oxide	AA
R1613	VRS-CY1JF132JY	J	1.3k 1/16W Metal Oxide	AG
R1616	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R1617	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R1618	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1619	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R1620	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R1621	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R1622	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1623	VRS-CY1JF681JY	J	680 1/16W Metal Oxide	AA
R1624	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R1625	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R1626	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R1627	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R1628	VRS-CY1JF681FY	J	680 1/16W Metal Oxide	AA
R1629	VRS-CY1JF681FY	J	680 1/16W Metal Oxide	AA
R1630	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R1631	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1632	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1634	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R1635	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R1636	VRS-CY1JF105JY	J	1M 1/16W Metal Oxide	AA
R1637	VRS-CY1JF105JY	J	1M 1/16W Metal Oxide	AA
R1642	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R1643	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R1645	VRS-CY1JF474JY	J	470k 1/16W Metal Oxide	AA
R1646	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R1653	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1659	VRS-CY1JF222JY	J	2.2k 1/16W Metal Oxide	AA
R1660	VRS-TW2ED240JY	J	24 1/4W Metal Oxide	AA
R1661	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R1662	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1663	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1664	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1665	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R1666	VRS-TW2ED240JY	J	24 1/4W Metal Oxide	AA
R1667	VRS-TW2ED240JY	J	24 1/4W Metal Oxide	AA
R1668	VRS-CY1JF332JY	J	3.3k 1/16W Metal Oxide	AA
R1669	VRS-CH1JF332JY	J	3.3k 1/16W Metal Oxide	AA
R1673	VRS-TW2ED240JY	J	24 1/4W Metal Oxide	AA
R1675	VRS-CY1JF332JY	J	3.3k 1/16W Metal Oxide	AA
R1676	VRS-TW2ED240JY	J	24 1/4W Metal Oxide	AA
R1683	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R2201	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R2202	VRS-CY1JF222JY	J	2.2k 1/16W Metal Oxide	AA
R2203	VRS-CY1JF222JY	J	2.2k 1/16W Metal Oxide	AA
R2204	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R2205	VRS-CY1JF221JY	J	220 1/16W Metal Oxide	AA
R2206	VRS-CY1JF152JY	J	1.5k 1/16W Metal Oxide	AA
R2207	VRS-CY1JF681JY	J	680 1/16W Metal Oxide	AA
R2208	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R2209	VRS-CY1JF181JY	J	180 1/16W Metal Oxide	AA
R2210	VRS-CY1JF561JY	J	560 1/16W Metal Oxide	AA
R2211	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R2212	VRS-CY1JF332JY	J	3.3k 1/16W Metal Oxide	AA
R2213	VRS-CY1JF221JY	J	220 1/16W Metal Oxide	AA
R2214	VRS-CY1JF152JY	J	1.5k 1/16W Metal Oxide	AA
R2215	VRS-CY1JF222JY	J	2.2k 1/16W Metal Oxide	AA
R2216	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R2217	VRS-CY1JF222JY	J	2.2k 1/16W Metal Oxide	AA
R2218	VRS-CY1JF221JY	J	220 1/16W Metal Oxide	AA
R2501	VRS-CY1JF750JY	J	75 1/16W Metal Oxide	AA
R2502	VRS-CY1JF750JY	J	75 1/16W Metal Oxide	AA
R2503	VRS-CY1JF750JY	J	75 1/16W Metal Oxide	AA
R2504	VRS-CY1JF750JY	J	75 1/16W Metal Oxide	AA
R2565	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2567	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2568	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2569	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2570	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2571	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2572	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R2573	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R2574	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R2575	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2576	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2577	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2578	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2579	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA

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MAIN Unit (Continued)

Ref. No.	Part No.	★	Description	Code
R2581	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R2582	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R2583	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R2584	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R2585	VRS-CB1JF101JY	J	100 1/16W Metal Oxide	AA
R2586	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R2587	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R2588	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R2589	VRS-CY1JF203JY	J	20k 1/16W Metal Oxide	AA
R2590	VRS-CY1JF750JY	J	75 1/16W Metal Oxide	AA
R2593	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R2594	VRS-CY1JF560JY	J	56 1/16W Metal Oxide	AA
R2595	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R2596	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R2597	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R2598	VRS-TW2ED000JY	J	0 1/4W Metal Oxide	AB
R3201	VRS-CB1JF101JY	J	100 1/16W Metal Oxide	AA
R3202	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3203	VRS-CY1JF105FY	J	1M 1/16W Metal Oxide	AA
R3205	VRS-CY1JF101FY	J	100 1/16W Metal Oxide	AD
R3206	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3207	VRS-CY1JF101FY	J	100 1/16W Metal Oxide	AD
R3208	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3209	VRS-CY1JF220JY	J	22 1/16W Metal Oxide	AA
R3210	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3211	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3212	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3213	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3214	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3216	VRS-CY1JF101FY	J	100 1/16W Metal Oxide	AD
R3217	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3218	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3221	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3222	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3223	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R3225	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R3228	VRS-CY1JF392JY	J	3.9k 1/16W Metal Oxide	AA
R3229	VRS-CY1JF392JY	J	3.9k 1/16W Metal Oxide	AA
R3232	VRS-TW2ED180JY	J	18 1/4W Metal Oxide	AA
R3233	VRS-CY1JF563JY	J	56k 1/16W Metal Oxide	AA
R3234	VRS-TW2ED180JY	J	18 1/4W Metal Oxide	AA
R3249	VRS-CY1JF471FY	J	470 1/16W Metal Oxide	AA
R3256	VRS-CY1JF471FY	J	470 1/16W Metal Oxide	AA
R3284	VRS-CY1JF105JY	J	1M 1/16W Metal Oxide	AA
R3285	VRS-CY1JF105JY	J	1M 1/16W Metal Oxide	AA
R3287	VRS-TV1JD560FY	J	56 1/16W Metal Oxide	AA
R3292	VRS-TW2ED471JY	J	470 1/4W Metal Oxide	AA
R3293	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3294	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3295	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3296	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3297	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3298	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3299	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3404	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R3407	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R3410	VRS-CY1JF220JY	J	22 1/16W Metal Oxide	AA
R3411	VRS-CY1JF220JY	J	22 1/16W Metal Oxide	AA
R3413	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3415	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3416	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3418	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3419	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3421	VRS-CA1JF101JY	J	100 1/16W Metal Oxide	AA
R3422	VRS-CY1JF220JY	J	22 1/16W Metal Oxide	AA
R3423	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3424	VRS-CY1JF101FY	J	100 1/16W Metal Oxide	AD
R3425	VRS-CA1JF101JY	J	100 1/16W Metal Oxide	AA
R3426	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3427	VRS-CY1JF105FY	J	1M 1/16W Metal Oxide	AA
R3428	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3429	VRS-CY1JF271JY	J	270 1/16W Metal Oxide	AA
R3431	VRS-CA1JF101JY	J	100 1/16W Metal Oxide	AA
R3432	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R3433	VRS-CY1JF105FY	J	1M 1/16W Metal Oxide	AA
R3434	VRS-CY1JF271JY	J	270 1/16W Metal Oxide	AA
R3435	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R3436	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R3437	VRS-CY1JF562JY	J	5.6k 1/16W Metal Oxide	AA
R3438	VRS-CY1JF393FY	J	39k 1/16W Metal Oxide	AA
R3439	VRS-CY1JF393FY	J	39k 1/16W Metal Oxide	AA
R3440	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R3441	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R3442	VRS-CY1JF473FY	J	47k 1/16W Metal Oxide	AA
R3443	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3445	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3446	VRS-CY1JF473FY	J	47k 1/16W Metal Oxide	AA
R3448	VRS-CY1JF222FY	J	2.2k 1/16W Metal Oxide	AA
R3449	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R3450	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R3451	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R3452	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R3453	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3454	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3455	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3456	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3457	VRS-CY1JF271FY	J	270 1/16W Metal Oxide	AA
R3458	VRS-CY1JF680FY	J	68 1/16W Metal Oxide	AA
R3459	VRS-CY1JF271FY	J	270 1/16W Metal Oxide	AA
R3460	VRS-CY1JF562JY	J	5.6k 1/16W Metal Oxide	AA
R3461	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3462	VRS-CY1JF471FY	J	470 1/16W Metal Oxide	AA
R3463	VRS-CY1JF471FY	J	470 1/16W Metal Oxide	AA
R3464	VRS-CY1JF473FY	J	47k 1/16W Metal Oxide	AA
R3465	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R3466	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R3467	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R3469	VRS-CY1JF220JY	J	22 1/16W Metal Oxide	AA
R3470	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3471	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3472	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3473	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3474	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R3475	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R3476	VRS-TW2ED000JY	J	0 1/4W Metal Oxide	AB
R3477	VRS-TW2ED000JY	J	0 1/4W Metal Oxide	AB
R3478	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3479	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3480	VRS-TQ2BD000JY	J	0 1/8W Metal Oxide	AA
R3481	VRS-TQ2BD000JY	J	0 1/8W Metal Oxide	AA
R3487	VRS-TW2ED101JY	J	100 1/4W Metal Oxide	AA
R3488	VRS-TW2ED101JY	J	100 1/4W Metal Oxide	AA
R3489	VRS-TW2ED101JY	J	100 1/4W Metal Oxide	AA
R3490	VRS-TW2ED101JY	J	100 1/4W Metal Oxide	AA
R3491	VRS-CY1JF220JY	J	22 1/16W Metal Oxide	AA
R3492	VRS-CY1JF220JY	J	22 1/16W Metal Oxide	AA
R3493	VRS-CY1JF220JY	J	22 1/16W Metal Oxide	AA
R3495	VRS-CY1JF101FY	J	100 1/16W Metal Oxide	AD
R3496	VRS-CY1JF220JY	J	22 1/16W Metal Oxide	AA
R3497	VRS-CY1JF220JY	J	22 1/16W Metal Oxide	AA
R3498	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3499	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3500	VRS-CY1JF562JY	J	5.6k 1/16W Metal Oxide	AA
R3501	VRS-CY1JF1R0JY	J	1 1/16W Metal Oxide	AA
R3502	VRS-CY1JF1R0JY	J	1 1/16W Metal Oxide	AA
R3503	VRS-CY1JF823JY	J	82k 1/16W Metal Oxide	AA
R3504	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R3505	VRS-CY1JF332FY	J	3.3k 1/16W Metal Oxide	AA
R3507	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R3510	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R3512	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R3514	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R3516	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3517	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3518	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3520	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3521	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R3522	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA

DUNTKC166DE01
MAIN Unit (Continued)

Ref. No.	Part No.	★	Description	Code
R3523	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3524	VRS-CY1JF273FY	J	27k 1/16W Metal Oxide	AA
R3525	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R3527	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R3528	VRS-CB1JF330JY	J	33 1/16W Metal Oxide	AC
R3529	VRS-CY1JF222JY	J	2.2k 1/16W Metal Oxide	AA
R3530	VRS-CY1JF330JY	J	33 1/16W Metal Oxide	AA
R3531	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3532	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R3533	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3534	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R3535	VRS-CY1JF330JY	J	33 1/16W Metal Oxide	AA
R3536	VRS-CY1JF330JY	J	33 1/16W Metal Oxide	AA
R3537	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3538	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R3540	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3541	VRS-CY1JF330JY	J	33 1/16W Metal Oxide	AA
R3542	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3543	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3544	VRS-CY1JF562JY	J	5.6k 1/16W Metal Oxide	AA
R3545	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3546	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3547	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3548	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3550	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3551	VRS-CY1JF222JY	J	2.2k 1/16W Metal Oxide	AA
R3552	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3553	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3554	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3555	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3556	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3557	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3558	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3559	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3560	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3561	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3562	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3563	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3564	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3565	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3566	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R3567	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R3568	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3569	VRS-CY1JF562JY	J	5.6k 1/16W Metal Oxide	AA
R3570	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3571	VRS-CY1JF274JY	J	270k 1/16W Metal Oxide	AA
R3572	VRS-CY1JF474JY	J	470k 1/16W Metal Oxide	AA
R3573	VRS-CY1JF562JY	J	5.6k 1/16W Metal Oxide	AA
R3574	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3575	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3576	VRS-CY1JF154JY	J	150k 1/16W Metal Oxide	AA
R3578	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R3579	VRS-CY1JF562JY	J	5.6k 1/16W Metal Oxide	AA
R3580	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3581	VRS-CY1JF562JY	J	5.6k 1/16W Metal Oxide	AA
R3582	VRS-CY1JF562JY	J	5.6k 1/16W Metal Oxide	AA
R3583	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R3584	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3586	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R3587	VRS-CY1JF473JY	J	47k 1/16W Metal Oxide	AA
R3588	VRS-CY1JF330JY	J	33 1/16W Metal Oxide	AA
R3589	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R3590	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R3591	VRS-CY1JF823JY	J	82k 1/16W Metal Oxide	AA
R3592	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3594	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3595	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3596	VRS-CY1JF123JY	J	12k 1/16W Metal Oxide	AA
R3597	VRS-CY1JF153JY	J	15k 1/16W Metal Oxide	AA
R3598	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R3599	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3600	VRS-CY1JF822JY	J	8.2k 1/16W Metal Oxide	AA
R3601	VRS-CY1JF562JY	J	5.6k 1/16W Metal Oxide	AA
R3602	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3604	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3605	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3606	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3607	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R3609	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3610	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3611	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R3612	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R3613	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3614	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R3615	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3616	VRS-CY1JF473JY	J	47k 1/16W Metal Oxide	AA
R3619	VRS-CY1JF333FY	J	33k 1/16W Metal Oxide	AA
R3620	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R3621	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R3622	VRS-CY1JF330JY	J	33 1/16W Metal Oxide	AA
R3624	VRS-CY1JF330JY	J	33 1/16W Metal Oxide	AA
R3626	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3627	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R3628	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3629	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3641	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3642	VRS-CY1JF473FY	J	47k 1/16W Metal Oxide	AA
R3643	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3645	VRS-CY1JF101FY	J	100 1/16W Metal Oxide	AD
R3649	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3650	VRS-CY1JF101FY	J	100 1/16W Metal Oxide	AD
R3653	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3654	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3660	VRS-CY1JF473JY	J	47k 1/16W Metal Oxide	AA
R3661	VRS-CY1JF330JY	J	33 1/16W Metal Oxide	AA
R3663	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3664	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3665	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3666	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3667	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA
R3668	VRS-CY1JF562JY	J	5.6k 1/16W Metal Oxide	AA
R3669	VRS-CY1JF562JY	J	5.6k 1/16W Metal Oxide	AA
R3670	VRS-CY1JF562JY	J	5.6k 1/16W Metal Oxide	AA
R3700	VRS-CA1JF152JY	J	1.5k 1/16W Metal Oxide	AA
R3701	VRS-CA1JF152JY	J	1.5k 1/16W Metal Oxide	AA
R3702	VRS-CB1JF152JY	J	1.5k 1/16W Metal Oxide	AC
R3704	VRS-TW2ED182JY	J	1.8k 1/4W Metal Oxide	AA
R3706	VRS-CA1JF334JY	J	330k 1/16W Metal Oxide	AB
R3707	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3708	VRS-CB1JF334JY	J	330k 1/16W Metal Oxide	AA
R3709	VRS-CB1JF334JY	J	330k 1/16W Metal Oxide	AA
R3712	VRS-CY1JF682FY	J	6.8k 1/16W Metal Oxide	AA
R3713	VRS-CY1JF105FY	J	1M 1/16W Metal Oxide	AA
R3715	VRS-CY1JF274JY	J	270k 1/16W Metal Oxide	AA
R3716	VRS-CY1JF133FY	J	13k 1/16W Metal Oxide	AA
R3718	VRS-CY1JF272JY	J	2.7k 1/16W Metal Oxide	AA
R3719	VRS-CY1JF273FY	J	27k 1/16W Metal Oxide	AA
R3720	VRS-CY1JF100FY	J	10 1/16W Metal Oxide	AB
R3721	VRS-CY1JF184FY	J	180k 1/16W Metal Oxide	AA
R3725	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R3726	VRS-TW2ED152JY	J	1.5k 1/4W Metal Oxide	AB
R3727	VRS-TW2ED102JY	J	1k 1/4W Metal Oxide	AA
R3729	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3730	VRS-CB1JF562JY	J	5.6k 1/16W Metal Oxide	AC
R3731	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3732	VRS-CB1JF562JY	J	5.6k 1/16W Metal Oxide	AC
R3733	VRS-CA1JF562JY	J	5.6k 1/16W Metal Oxide	AA
R3734	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R3735	VRS-CY1JF333FY	J	33k 1/16W Metal Oxide	AA
R3741	VRS-CY1JF1R0JY	J	1 1/16W Metal Oxide	AA
R3750	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R3753	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3754	VRS-CY1JF473FY	J	47k 1/16W Metal Oxide	AA
R3755	VRS-CY1JF622FY	J	6.2k 1/16W Metal Oxide	AA
R3756	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3757	VRS-CY1JF222FY	J	2.2k 1/16W Metal Oxide	AA
R3759	VRS-TQ2BD683JY	J	68k 1/8W Metal Oxide	AA
R3760	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA

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MAIN Unit (Continued)

Ref. No.	Part No.	★	Description	Code
R3761	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3762	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3768	VRS-TW2ED000JY	J	0 1/4W Metal Oxide	AB
R3769	VRS-TW2ED000JY	J	0 1/4W Metal Oxide	AB
R3770	VRS-TW2ED000JY	J	0 1/4W Metal Oxide	AB
R3771	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3772	VRS-CY1JF432JY	J	4.3k 1/16W Metal Oxide	AA
R3773	VRS-CY1JF753FY	J	75k 1/16W Metal Oxide	AA
R3774	VRS-CY1JF202JY	J	2k 1/16W Metal Oxide	AA
R3775	VRS-CY1JF133FY	J	13k 1/16W Metal Oxide	AA
R3776	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R3777	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R3778	VRS-TW2ED000JY	J	0 1/4W Metal Oxide	AB
R3780	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R3781	VRS-TW2ED102JY	J	1k 1/4W Metal Oxide	AA
R3782	VRS-TW2ED000JY	J	0 1/4W Metal Oxide	AB
R3790	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R3791	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4502	VRS-TV1JD222JY	J	2.2k 1/16W Metal Oxide	AA
R4503	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R4504	VRS-TV1JD223JY	J	22k 1/16W Metal Oxide	AA
R4505	VRS-TW2ED821JY	J	820 1/4W Metal Oxide	AB
R4506	RR-NZ0027TAZZY	J	0.056 1/2W Metal Oxide	AC
R4507	VRS-CY1JF154FY	J	150k 1/16W Metal Oxide	AA
R4508	VRS-TW2ED123JY	J	12k 1/4W Metal Oxide	AA
R4509	VRS-TW2ED153JY	J	15k 1/4W Metal Oxide	AA
R4510	VRS-CY1JF683FY	J	68k 1/16W Metal Oxide	AA
R4511	VRS-CY1JF154FY	J	150k 1/16W Metal Oxide	AA
R4512	VRS-CY1JF121JY	J	120 1/16W Metal Oxide	AA
R4513	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4514	VRS-CY1JF124FY	J	120k 1/16W Metal Oxide	AA
R4515	VRS-CY1JF105FY	J	1M 1/16W Metal Oxide	AA
R4516	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R4517	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4518	VRS-CY1JF393FY	J	39k 1/16W Metal Oxide	AA
R4519	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R4521	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R4523	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R4524	VRS-CY1JF392JY	J	3.9k 1/16W Metal Oxide	AA
R4525	RVR-M0116CEZZY	J	0 1/16W Metal Oxide	AA
R4526	VRS-CY1JF623FY	J	62k 1/16W Metal Oxide	AA
R4527	VRS-CY1JF104JY	J	100k 1/16W Metal Oxide	AA
R4528	VRS-CY1JF223JY	J	22k 1/16W Metal Oxide	AA
R4529	VRS-CY1JF222FY	J	2.2k 1/16W Metal Oxide	AA
R4530	VRS-CY1JF105FY	J	1M 1/16W Metal Oxide	AA
R4531	VRS-CY1JF560JY	J	56 1/16W Metal Oxide	AA
R4532	VRS-CY1JF470JY	J	47 1/16W Metal Oxide	AA
R4533	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4534	VRS-CY1JF101FY	J	100 1/16W Metal Oxide	AD
R4536	VRS-CY1JF331FY	J	330 1/16W Metal Oxide	AA
R4540	VRS-CY1JF101FY	J	100 1/16W Metal Oxide	AD
R4541	VRS-CA1JF101JY	J	100 1/16W Metal Oxide	AA
R4543	VRS-CA1JF101JY	J	100 1/16W Metal Oxide	AA
R4544	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4545	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4549	VRS-CY1JF151JY	J	150 1/16W Metal Oxide	AA
R4550	VRS-CA1JF330JY	J	33 1/16W Metal Oxide	AC
R4551	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R4552	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R4553	VRS-CY1JF101FY	J	100 1/16W Metal Oxide	AD
R4554	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4556	VRS-CY1JF220JY	J	22 1/16W Metal Oxide	AA
R4558	VRS-CY1JF101FY	J	100 1/16W Metal Oxide	AD
R4561	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R4564	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4566	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4567	VRS-CA1JF103JY	J	10k 1/16W Metal Oxide	AA
R4568	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4569	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4570	VRS-CY1JF330FY	J	33 1/16W Metal Oxide	AA
R4571	VRS-CY1JF330FY	J	33 1/16W Metal Oxide	AA
R4572	VRS-CY1JF330FY	J	33 1/16W Metal Oxide	AA
R4573	VRS-CY1JF330FY	J	33 1/16W Metal Oxide	AA
R4574	VRS-CY1JF330FY	J	33 1/16W Metal Oxide	AA
R4575	VRS-CY1JF330JY	J	33 1/16W Metal Oxide	AA
R4576	VRS-CY1JF220FY	J	22 1/16W Metal Oxide	AA
R4577	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4578	VRS-CY1JF220FY	J	22 1/16W Metal Oxide	AA
R4579	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4580	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4581	VRS-CY1JF471FY	J	470 1/16W Metal Oxide	AA
R4582	VRS-CB1JF103JY	J	10k 1/16W Metal Oxide	AA
R4583	VRS-CB1JF103JY	J	10k 1/16W Metal Oxide	AA
R4585	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4588	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4589	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4590	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4591	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4592	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4593	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4594	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4595	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4596	VRS-CY1JF560JY	J	56 1/16W Metal Oxide	AA
R4598	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4601	VRS-CB1JF000JY	J	0 1/16W Metal Oxide	AC
R4603	VRS-CY1JF470JY	J	47 1/16W Metal Oxide	AA
R4604	VRS-TQ2BD000JY	J	0 1/8W Metal Oxide	AA
R4606	VRS-CY1JF750FY	J	75 1/16W Metal Oxide	AA
R4607	VRS-CY1JF750FY	J	75 1/16W Metal Oxide	AA
R4608	VRS-CY1JF750FY	J	75 1/16W Metal Oxide	AA
R4609	VRS-CY1JF181FY	J	180 1/16W Metal Oxide	AA
R4610	VRS-CY1JF473FY	J	47k 1/16W Metal Oxide	AA
R4611	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4612	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4613	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4614	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4615	VRS-CY1JF330FY	J	33 1/16W Metal Oxide	AA
R4616	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4618	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4619	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4620	VRS-CA1JF101JY	J	100 1/16W Metal Oxide	AA
R4621	VRS-CY1JF680JY	J	68 1/16W Metal Oxide	AA
R4622	VRS-CY1JF101FY	J	100 1/16W Metal Oxide	AD
R4623	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R4624	VRS-CY1JF332FY	J	3.3k 1/16W Metal Oxide	AA
R4625	VRS-CY1JF332FY	J	3.3k 1/16W Metal Oxide	AA
R4626	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R4627	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R4628	VRS-CY1JF471FY	J	470 1/16W Metal Oxide	AA
R4629	VRS-CY1JF471FY	J	470 1/16W Metal Oxide	AA
R4630	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R4631	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R4632	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4633	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4634	VRS-CY1JF101FY	J	100 1/16W Metal Oxide	AD
R4635	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R4639	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4641	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4642	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4643	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4644	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4645	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4660	VRS-CA1JF220JY	J	22 1/16W Metal Oxide	AA
R4661	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4662	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4663	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4664	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4665	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4666	VRS-CB1JF220JY	J	22 1/16W Metal Oxide	AC
R4667	VRS-TW2ED153JY	J	15k 1/4W Metal Oxide	AA
R4668	VRS-TW2ED123JY	J	12k 1/4W Metal Oxide	AA
R4700	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4701	VRS-TW2ED331JY	J	330 1/4W Metal Oxide	AB
R4702	VRS-CY1JF100FY	J	10 1/16W Metal Oxide	AB
R4703	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R4704	VRS-CY1JF153FY	J	15k 1/16W Metal Oxide	AA
R4705	VRS-CY1JF330FY	J	33 1/16W Metal Oxide	AA
R4706	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA

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MAIN Unit (Continued)

Ref. No.	Part No.	★	Description	Code
R4707	VRS-TW2ED330JY	J	33 1/4W Metal Oxide	AA
R4708	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R4709	VRS-CY1JF682FY	J	6.8k 1/16W Metal Oxide	AA
R4710	VRS-CY1JF332FY	J	3.3k 1/16W Metal Oxide	AA
R4711	VRS-CY1JF332FY	J	3.3k 1/16W Metal Oxide	AA
R4713	VRS-CY1JF683FY	J	68k 1/16W Metal Oxide	AA
R4714	VRS-CY1JF913FY	J	91k 1/16W Metal Oxide	AA
R4715	VRS-CY1JF473FY	J	47k 1/16W Metal Oxide	AA
R4716	VRS-CY1JF100FY	J	10 1/16W Metal Oxide	AB
R4717	VRS-TW2ED331JY	J	330 1/4W Metal Oxide	AB
R4718	VRS-CY1JF183FY	J	18k 1/16W Metal Oxide	AA
R4719	VRS-CY1JF112FY	J	1.1k 1/16W Metal Oxide	AA
R4720	VRS-CY1JF330FY	J	33 1/16W Metal Oxide	AA
R4721	VRS-CY1JF332FY	J	3.3k 1/16W Metal Oxide	AA
R4722	VRS-CY1JF751FY	J	750 1/16W Metal Oxide	AA
R4723	VRS-CY1JF680FY	J	68 1/16W Metal Oxide	AA
R4724	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4725	VRS-CY1JF682FY	J	6.8k 1/16W Metal Oxide	AA
R4726	VRS-CY1JF332FY	J	3.3k 1/16W Metal Oxide	AA
R4727	VRS-CY1JF473FY	J	47k 1/16W Metal Oxide	AA
R4728	VRS-CY1JF153FY	J	15k 1/16W Metal Oxide	AA
R4729	VRS-CY1JF332FY	J	3.3k 1/16W Metal Oxide	AA
R4731	VRS-CB1JF100JY	J	10 1/16W Metal Oxide	AA
R4732	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R4733	VRS-CY1JF303FY	J	30k 1/16W Metal Oxide	AA
R4734	VRS-CY1JF113FY	J	11k 1/16W Metal Oxide	AA
R4735	VRS-CY1JF271FY	J	270 1/16W Metal Oxide	AA
R4736	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R4737	VRS-CY1JF823FY	J	82k 1/16W Metal Oxide	AA
R4738	VRS-CY1JF333FY	J	33k 1/16W Metal Oxide	AA
R4739	VRS-CY1JF621FY	J	620 1/16W Metal Oxide	AA
R4740	VRS-CB1JF330JY	J	33 1/16W Metal Oxide	AC
R4741	VRS-CY1JF273FY	J	27k 1/16W Metal Oxide	AA
R4742	VRS-CY1JF123FY	J	12k 1/16W Metal Oxide	AA
R4743	VRS-CY1JF430FY	J	43 1/16W Metal Oxide	AA
R4744	VRS-CY1JF623FY	J	62k 1/16W Metal Oxide	AA
R4745	VRS-CY1JF303FY	J	30k 1/16W Metal Oxide	AA
R4746	VRS-CY1JF431FY	J	430 1/16W Metal Oxide	AA
R4747	VRS-CB1JF330JY	J	33 1/16W Metal Oxide	AC
R4748	VRS-CB1JF100JY	J	10 1/16W Metal Oxide	AA
R4749	VRS-CY1JF623FY	J	62k 1/16W Metal Oxide	AA
R4750	VRS-CY1JF333FY	J	33k 1/16W Metal Oxide	AA
R4751	VRS-CY1JF161FY	J	160 1/16W Metal Oxide	AA
R4753	VRS-CY1JF752FY	J	7.5k 1/16W Metal Oxide	AA
R4754	VRS-CY1JF682FY	J	6.8k 1/16W Metal Oxide	AA
R4755	VRS-CY1JF681FY	J	680 1/16W Metal Oxide	AA
R4756	VRS-CY1JF330FY	J	33 1/16W Metal Oxide	AA
R4757	VRS-CY1JF100FY	J	10 1/16W Metal Oxide	AB
R4758	VRS-CY1JF163FY	J	16k 1/16W Metal Oxide	AA
R4759	VRS-CY1JF203FY	J	20k 1/16W Metal Oxide	AA
R4760	VRS-CY1JF621FY	J	620 1/16W Metal Oxide	AA
R4761	VRS-CY1JF330FY	J	33 1/16W Metal Oxide	AA
R4762	VRS-CY1JF100FY	J	10 1/16W Metal Oxide	AB
R4763	VRS-CY1JF333FY	J	33k 1/16W Metal Oxide	AA
R4764	VRS-CY1JF683FY	J	68k 1/16W Metal Oxide	AA
R4765	VRS-CY1JF181FY	J	180 1/16W Metal Oxide	AA
R4766	VRS-CB1JF330JY	J	33 1/16W Metal Oxide	AC
R4767	VRS-CB1JF100JY	J	10 1/16W Metal Oxide	AA
R4768	VRS-CY1JF183FY	J	18k 1/16W Metal Oxide	AA
R4769	VRS-CY1JF393FY	J	39k 1/16W Metal Oxide	AA
R4770	VRS-CY1JF750FY	J	75 1/16W Metal Oxide	AA
R4771	VRS-CY1JF362FY	J	3.6k 1/16W Metal Oxide	AA
R4772	VRS-CY1JF822FY	J	8.2k 1/16W Metal Oxide	AA
R4773	VRS-CY1JF201FY	J	200 1/16W Metal Oxide	AA
R4774	VRS-CY1JF203FY	J	20k 1/16W Metal Oxide	AA
R4775	VRS-CY1JF513FY	J	51k 1/16W Metal Oxide	AA
R4776	VRS-CY1JF431FY	J	430 1/16W Metal Oxide	AA
R4777	VRS-CB1JF330JY	J	33 1/16W Metal Oxide	AC
R4778	VRS-CY1JF202FY	J	2k 1/16W Metal Oxide	AA
R4779	VRS-CY1JF473FY	J	47k 1/16W Metal Oxide	AA
R4780	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R4781	VRS-CY1JF912FY	J	9.1k 1/16W Metal Oxide	AA
R4782	VRS-CY1JF132FY	J	1.3k 1/16W Metal Oxide	AA
R4784	VRS-CB1JF100JY	J	10 1/16W Metal Oxide	AA
R4785	VRS-CY1JF100FY	J	10 1/16W Metal Oxide	AB
R4786	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R4787	VRS-CY1JF273FY	J	27k 1/16W Metal Oxide	AA
R4788	VRS-CY1JF432FY	J	4.3k 1/16W Metal Oxide	AA
R4789	VRS-CY1JF823FY	J	82k 1/16W Metal Oxide	AA
R4790	VRS-CY1JF473FY	J	47k 1/16W Metal Oxide	AA
R4791	VRS-CY1JF750FY	J	75 1/16W Metal Oxide	AA
R4792	VRS-CY1JF301FY	J	300 1/16W Metal Oxide	AA
R4793	VRS-CY1JF331FY	J	330 1/16W Metal Oxide	AA
R4794	VRS-CY1JF100FY	J	10 1/16W Metal Oxide	AB
R4795	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4796	VRS-CY1JF682FY	J	6.8k 1/16W Metal Oxide	AA
R4797	VRS-CY1JF243FY	J	24k 1/16W Metal Oxide	AA
R4798	VRS-CY1JF100FY	J	10 1/16W Metal Oxide	AB
R4799	VRS-CB1JF101JY	J	100 1/16W Metal Oxide	AA
R4905	VRS-CY1JF000JY	J	0 1/16W Metal Oxide	AA
R4909	VRS-TQ2BD000JY	J	0 1/8W Metal Oxide	AA
R4911	VRS-CY1JF332FY	J	3.3k 1/16W Metal Oxide	AA
R4912	VRS-CY1JF102FY	J	1k 1/16W Metal Oxide	AA
R4913	VRS-CY1JF103FY	J	10k 1/16W Metal Oxide	AA
R4914	VRS-CY1JF332FY	J	3.3k 1/16W Metal Oxide	AA

MISCELLANEOUS PARTS

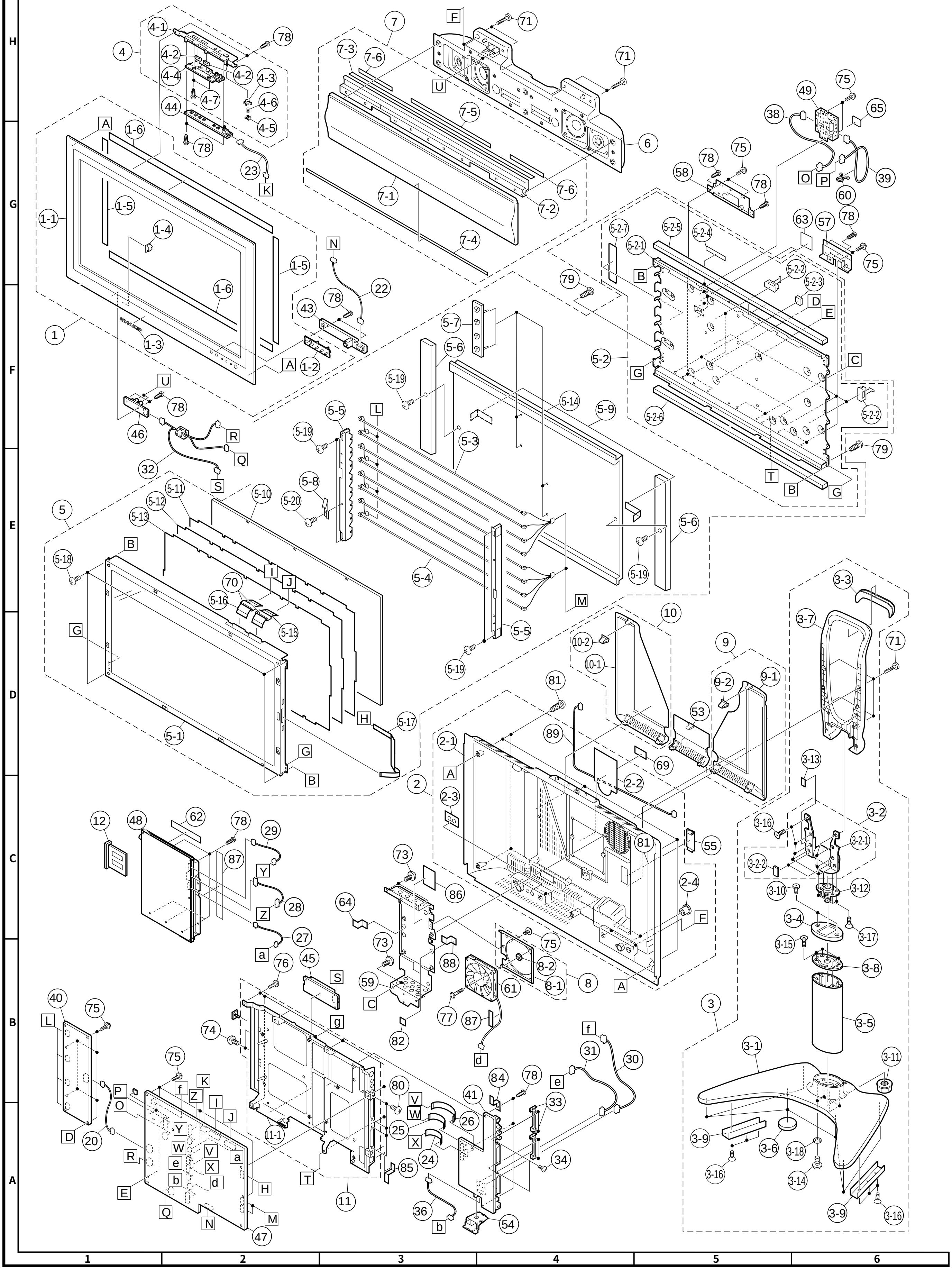
Ref. No.	Part No.	★	Description	Code
⚠F3701	QFS-D0009CEZZ	J	Fuse, 2.5A/250V	AE
⚠F3702	QFS-D0010CEZZ	J	Fuse, 3.15A/250V	AE
⚠FH700	QFSHD1002CEZZ	J	Fuse Holder	AA
⚠FH701	QFSHD1002CEZZ	J	Fuse Holder	AA
⚠FH702	QFSHD1002CEZZ	J	Fuse Holder	AA
⚠FH703	QFSHD1002CEZZ	J	Fuse Holder	AA
P301	QEARBA005WJFMY	J	Ground-Part	AD
P302	QEARBA005WJFMY	J	Ground-Part	AD
P303	QEARBA005WJFMY	J	Ground-Part	AD
P304	QEARBA005WJFMY	J	Ground-Part	AD
P305	QEARBA005WJFMY	J	Ground-Part	AD
P2501	QPLGNA041WJZZ	J	Plug, 2pin (MA)	AB
P2502	QPLGN0278GEZZ	J	Plug, 2pin (ME)	AA
P3201	QPLGN0568FJZZY	J	Plug, 6pin (TP3)	AE
P3401	QPLGN1558REZZY	J	Plug, 15pin (SA)	AD
P3402	QPLGN0858REZZY	J	Plug, 8pin (SB)	AD
P3403	QPLGNA058WJZZ	J	Plug, 4pin (SC)	AC
P3404	QPLGNA058WJZZ	J	Plug, 4pin (SD)	AC
P3405	QPLGNA057WJZZ	J	Plug, 3pin (MG)	AB
P3501	QPLGNA066WJZZ	J	Plug, 12pin (RA)	AD
P3503	QPLGN0564TAZZY	J	Plug, 5pin (KA)	AC
P3504	QPLGN0572FJZZY	J	Plug, 10pin (TP1)	AE
P3700	QPLGN0177FJZZY	J	Plug, 5pin (GA)	AC
P3701	QPLGN0177FJZZY	J	Plug, 5pin (GB)	AC
P3702	QPLGNA059WJZZ	J	Plug, 5pin (PF)	AC
P3703	QPLGNA051WJZZ	J	Plug, 12pin (MB)	AB
P3704	QPLGN0541FJZZY	J	Plug, 4pin (MF)	AD
P3705	QPLGN0540FJZZY	J	Plug, 3pin (MF)	AD
P4501	QLUGHA001WJZZY	J	Lug	AD
P4502	QPLGN0572FJZZY	J	Plug, 10pin (TP2)	AE
P4901	QLUGHA001WJZZY	J	Lug	AD
P4902	QLUGHA006WJZZY	J	Lug	AC
RY3401	RRLYDA002WJZZY	J	Relay	AK
RY3402	RRLYDA004WJZZ	J	Relay	AN
RY3403	RRLYDA002WJZZY	J	Relay	AK
SC2500	QPLGN0296FJZZ	J	Plug, 20pin (MD)	AD
SC2501	QSOCN0488FJZZY	J	Socket, 22pin (VA)	AE
SC2503	QSOCN0487FJZZY	J	Socket, 20pin (VB)	AE
SC2504	QSOCN0488FJZZY	J	Socket, 22pin (VC)	AE
SC4501	QSOCN0684FJZZY	J	Socket, 30pin (GD)	AF
SC4901	QSOCN0687FJZZY	J	Socket, 50pin (SCN2)	AF
SC4902	QSOCN0688FJZZY	J	Socket, 53pin (SCN1)	AF
FB801	RBLN-A022WJZZY	J	Ferrite Bead	AA
FB802	RBLN-A022WJZZY	J	Ferrite Bead	AA
FB803	RBLN-0051TAZZY	J	Ferrite Bead	AC
FB1601	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB1602	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB1604	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB1605	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB1608	VRS-CY1JF000JY	J	00 1/16W 5% Metal Oxide	AA

DUNTKC166DE01
MAIN Unit (Continued)

Ref. No.	Part No.	★	Description	Code
FB1609	VRS-CY1JF000JY	J	00 1/16W 5% Metal Oxide	AA
FB1610	RBLN-0050TAZZY	J	Ferrite Bead	AA
FB1611	RBLN-0050TAZZY	J	Ferrite Bead	AA
FB1640	RBLN-0076TAZZY	J	Ferrite Bead	AC
FB1641	RBLN-0076TAZZY	J	Ferrite Bead	AC
FB1672	RBLN-0076TAZZY	J	Ferrite Bead	AC
FB1674	RBLN-0067TAZZY	J	Ferrite Bead	AC
FB3201	RBLN-0035TAZZY	J	Ferrite Bead	AB
FB3202	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB3401	RBLN-0061TAZZY	J	Ferrite Bead	AD
FB3701	RBLN-0095CEZZY	J	Ferrite Bead	AD
FB3702	RBLN-0095CEZZY	J	Ferrite Bead	AD
FB3703	RBLN-0095CEZZY	J	Ferrite Bead	AD
FB3705	RBLN-0051TAZZY	J	Ferrite Bead	AC
FB3706	RBLN-0051TAZZY	J	Ferrite Bead	AC
FB3707	VRS-CY1JF000JY	J	00 1/16W 5% Metal Oxide	AA
FB3708	RBLN-0051TAZZY	J	Ferrite Bead	AC
FB4501	RBLN-0252TAZZY	J	Ferrite Bead	AA
FB4502	RBLN-0252TAZZY	J	Ferrite Bead	AA
FB4503	RBLN-0077TAZZY	J	Ferrite Bead	AB
FB4504	RBLN-0050TAZZY	J	Ferrite Bead	AA
FB4505	RBLN-A022WJZZY	J	Ferrite Bead	AA
FB4507	RBLN-0050TAZZY	J	Ferrite Bead	AA
FB4508	RBLN-0050TAZZY	J	Ferrite Bead	AA
FB4510	RBLN-0252TAZZY	J	Ferrite Bead	AA
FB4512	RBLN-0076TAZZY	J	Ferrite Bead	AC
FB4513	RBLN-0076TAZZY	J	Ferrite Bead	AC
FB4514	RBLN-0076TAZZY	J	Ferrite Bead	AC
FB4515	RBLN-0076TAZZY	J	Ferrite Bead	AC
FB4516	RBLN-0076TAZZY	J	Ferrite Bead	AC
FB4517	RBLN-0076TAZZY	J	Ferrite Bead	AC
FB4601	RBLN-0050TAZZY	J	Ferrite Bead	AA
FB4605	RBLN-0050TAZZY	J	Ferrite Bead	AA
FB4610	RBLN-0050TAZZY	J	Ferrite Bead	AA
FB4611	RBLN-A028WJZZY	J	Ferrite Bead	

Ref. No.	Part No.	★	Description	Code

CABINET AND MECHANICAL PARTS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CABINET AND MECHANICAL PARTS

Ref. No.	Part No.	★	Description	Code
1	CCABAA380WJ01	J	Front Cabinet Ass'y	BL
1-1	*Not Available*	–	Front Cabinet	—
1-2	GCOVAA449WJSA	J	RC/LED Cover	AE
1-3	HBDGBA011WJSA	J	Badge "SHARP"	AG
1-4	LHLDW1025TAZZ	J	Holder	AB
1-5	PSPAH0726CEUZ	J	Spacer, x2	AC
1-6	PSPAH0727CEUZ	J	Spacer, x2	AC
2	CCABBA275WJ01	J	Rear Cabinet Ass'y	BC
2-1	*Not Available*	–	Rear Cabinet	—
2-2	HiNDPA567WJSA	J	Indicator	AF
2-3	HiNDPA589WJSA	J	Indicator	AD
2-4	LHLDZ0132CEZZ	J	Holder, x2	AD
3	CDAi-A045WJ09	J	Stand	BR
3-1	GDAi-A111WJSA	J	Stand, Base	
3-2	CDAi-1123CE06	J	Stand Joint Ass'y	BC
3-2-1	*Not Available*	–	Stand Joint	—
3-2-2	PSPAZA083WJZZ	J	Spacer, x2	AB
3-3	GCOVA1945CESA	J	Handle Grip	AK
3-4	GCOVAA251WJSA	J	Stand Base Joint	AM
3-5	GDAi-A082WJSA	J	Stand Support	AS
3-6	GLEGGA014WJZZ	J	Foot, x6	AB
3-7	JHNDP0103CESA	J	Carrying Handle	AX
3-8	LANGGA016WJFW	J	Swivel Base	AG
3-9	LANGHA002WJFW	J	Fixing Metal, x2	AH
3-10	LX-BZA019WJFN	J	Screw, x2	AB
3-11	LX-NZA001WJFN	J	Nut	AD
3-12	MHNG-A004WJFW	J	Swivel Hinge	AU
3-13	TLABZ0793CESF	J	Label	AC
3-14	XCBSN50P25000	J	Screw, x4	AB
3-15	XCSSN50P20000	J	Screw, x4	AB
3-16	XESSN40P10000	J	Screw, x14	AB
3-17	XUSSN40P20000	J	Screw, x4	AA
3-18	XWHSN50-16120	J	Washer, x4	AB
4	CCOVAA537WJ01	J	Top Cover Ass'y	AS
4-1	*Not Available*	–	Top Cover	—
4-2	GCOVAA259WJKA	J	Botton Cover, x2	AE
4-3	JBTN-A088WJKA	J	Power Button	AF
4-4	JBTN-A100WJKA	J	Control Button	AL
4-5	LHLDZA027WJKZ	J	Power Botton Holder	AE
4-6	MSPRCA014WJFW	J	Power Botton Spring	AB
4-7	XEBSN30P08000	J	Screw, x2	AA
5	*Not Available*	–	22"LCD Panel Unit Ass'y	—
5-1	RLCDTA021WJZZ	J	22" LCD panel unit	EM
5-2	*Not Available*	–	Back Shielding Plate Ass'y	—
5-2-1	PSLDMA322WJFW	J	Back Shielding Plate	AV
5-2-2	LHLDW1173CEZZ	J	Wire Holder, x5	AD
5-2-3	PMLT-A100WJZZ	J	Shield spacer, x2	AB
5-2-4	PSPAGA136WJZZ	J	Spacer, x4	AB
5-2-5	PSPAZ0473CEZZ	J	Shield spacer	AE
5-2-6	PSPAZA392WJZZ	J	Spacer	AE
5-2-7	TCAUZA031WJZZ	J	Caution Card	AB
5-3	KLMP-A022WJZZ	J	Lamp Unit-A	BE
5-4	KLMP-A023WJZZ	J	Lamp Unit-B	BE
5-5	LHLDZA218WJKZ	J	Lamp Fixing Holder (Top), x2	AL
5-6	LHLDZA219WJKZ	J	Lamp Fixing Holder (Bottom), x2	AK
5-7	LHLDZA223WJKZ	J	Lamp Clip, x2	AE
5-8	MSPRP1220CEFW	J	ITO Earth Spring	AC
5-9	PSPAH0678CEZZ	J	HIMERON, x2	AA
5-10	PCOVU0108CEZZ	J	Diffusion Panel	AY
5-11	PSHEP0294CEZZ	J	Diffusion Sheet	AQ
5-12	PSHEPA002WJZZ	J	Prism Sheet	BE
5-13	PSHEPA003WJZZ	J	Reflection/Deflection Sheet	BR
5-14	PSHEPA112WJZZ	J	Reflection Sheet	AN
5-15	QCNW-B658WJQZ	J	Connecting Cord (SCN1)	AD
5-16	QCNW-B659WJQZ	J	Connecting Cord (SCN2)	AD
5-17	QCNW-B657WJQZ	J	Connecting Cord (GD)	AE
5-18	XBBSN30P05000	J	Screw, x6	AA
5-19	XBBSN30P08000	J	Screw, x4	AA
5-20	XEBSN30P08000	J	Screw	AA
6	RSP-ZA037WJN2	J	Speaker	BM
7	CPNLSA007WJ01	J	Speaker net Ass'y	BF
7-1	*Not Available*	–	Speaker net	—
7-2	GCOVAA448WJSA	J	Speaker net Decoration Cover	AW
7-3	PSPAGA128WJZZ	J	Spacer	AE
7-4	PSPAGA156WJZZ	J	Spacer-D	AC
7-5	PSPAHA238WJZZ	J	Spacer-B	AC
7-6	PSPAHA239WJZZ	J	Spacer-C	AC
8	CANGFA053WJ01	J	Fan Angle Ass'y	AL
8-1	*Not Available*	–	Fan Angle	—
8-2	PSPAG0234CE00	J	Gum Spacer	AA
9	CCOVAA509WJ01	J	Terminal Cover (L) Ass'y	AS
9-1	*Not Available*	–	Terminal Cover (L)	—
9-2	LHLDZA267WJKA	J	Holder	AE
10	CCOVAA510WJ01	J	Terminal Cover (R) Ass'y	AS
10-1	*Not Available*	–	Terminal Cover (R)	—
10-2	LHLDZA267WJKA	J	Holder	AE
11	GCOVAA514WJKA	J	Chassis Frame	AS
12	GCOVHA042WJKB	J	PC Card Cover	AE
20	QCNW-B961WJQZ	J	Connecting Cord (PF)	AH
22	QCNW-B445WJQZ	J	Connecting Cord (RA)	AM
23	QCNW-B444WJQZ	J	Connecting Cord (KA)	AG
24	QCNW-B886WJQZ	J	Connecting Cord (VA)	AC
25	QCNW-B887WJQZ	J	Connecting Cord (VB)	AC
26	QCNW-B888WJQZ	J	Connecting Cord (VC)	AD
27	QCNW-B953WJQZ	J	Connecting Cord (ME)	AE
28	QCNW-B954WJQZ	J	Connecting Cord (MF)	AG
29	QCNW-B952WJQZ	J	Connecting Cord (MD)	AP
30	QCNW-B962WJQZ	J	Connecting Cord (MG)	AG
31	QCNW-B955WJQZ	J	Connecting Cord (MA)	
32	QCNW-C315WJQZ	J	Connecting Cord (MAIN-SP_SC_SD)	AS
33	LANGK0782CEFW	J	Fixing Metal	AF
34	XBBS930P08000	J	Screw x4	AA
36	QCNW-B956WJQZ	J	Connecting Cord (MB)	AN
38	QCNW-B958WJQZ	J	Connecting Cord (SB)	AK
39	QCNW-B957WJPZ	J	Connecting Cord (SA)	AQ
40	DUNTKB973FE04	–	INVERTER Unit	—
41	DUNTKC160DE01	–	AV Unit	—
43	DUNTKC162DE01	–	R/C, LED Unit	—
44	DUNTKC163DE01	–	OPERATION Unit	—
45	DUNTKC164DE01	–	EXT-SP TERMINAL Unit	—
46	DUNTKC165DE01	–	SP-JACK Unit	—
47	DUNTKC166DE01	–	MAIN Unit	—
48	RUNTKA060WJZZ	J	EU-DIGITAL Unit	CR
49	B2SX4052BT	J	1BIT-AMP Unit	BL
53	GCOVAA511WJKA	J	Terminal Cover (C)	AM
54	GCOVAA536WJKA	J	Chassis Frame Cover	AG
55	GCOVA2072CEKA	J	BASS-Connector Cover	AE
57	LANGKA167WJFW	J	SP Angle (L)	AK
58	LANGKA214WJFW	J	SP Angle (R)	AH
59	LANGTA085WJFW	J	Stand Reinforcement Angle	AR
60	LHLDW1060CEZZ	J	Wire Holder	AB
61	NFANR0126CEZZ	J	FAN	AT
62	PSLDMA382WJZZ	J	Shield	AH
63	PSPAZA327WJKZ	J	Spacer	AN
64	PFLT-A037WJZZ	J	Felt	AG
65	PSLDMA349WJZZ	J	Gasket	AF
69	*Not Available*	–	Sirial No.Label (LC-22AD1E)	—
70	RCORFA028WJZZ	J	Core, x2	AK
71	LX-BZ3442CEF9	J	Screw, x8	AB
73	XBBSN40P06000	J	Screw, x4	AA
74	XEBS930P08000	J	Screw, x2	AA
75	XBPSN30P06JS0	J	Screw, x15	AB
76	XBPSN30P08JS0	J	Screw, x7	AB
77	XBPSN30P20XS0	J	Screw, x2	AB
78	XEBSN30P08000	J	Screw, x19	AA
79	XEBSN40P10000	J	Screw, x2	AB
80	XEBS930P08000	J	Screw, x4	AA

CABINET AND MECHANICAL PARTS (Continued)

Ref. No.	Part No.	★	Description	Code
81	XEBS940P16000	J	Screw, x6	AB
84	QEARPA103WJFW	J	Ground-Part	AE
85	QEARPA104WJFW	J	Ground-Part	AE
86	PSPAZA416WJZZ	J	Spacer	AF
87	PSLDMA353WJZZ	J	Shield	AQ
88	PFLT-A037WJZZ	J	Felt	AG
89	QCNW-B741WJZZ	J	Connecting Cord	AL

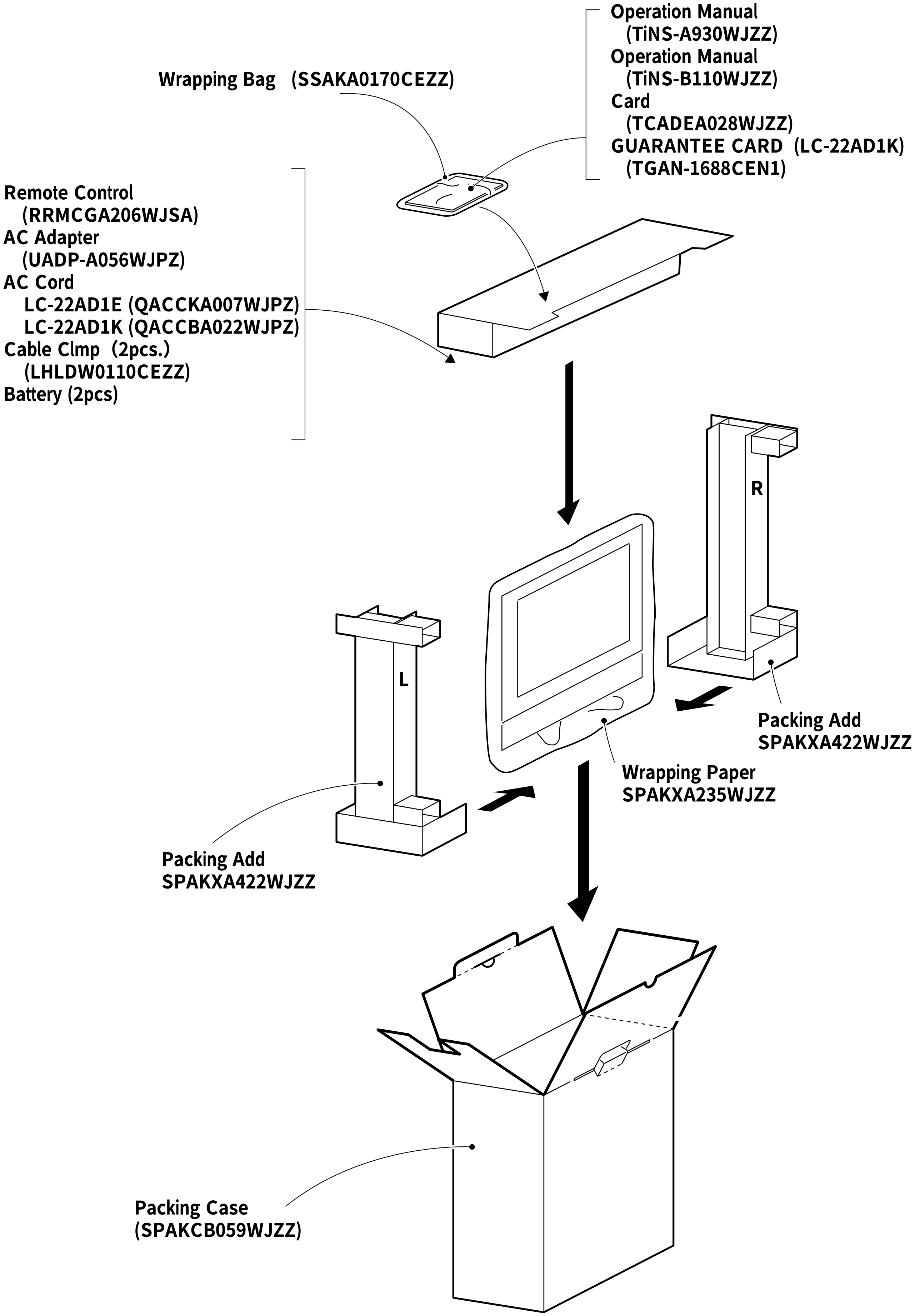
SUPPLIED ACCESSORIES

Ref. No.	Part No.	★	Description	Code
	RCORFA020WJZZ	J	Ferrite Core	AN
⚠	UADP-A056WJPZ	J	AC Adaptor	BT
⚠	QACCKA007WJPZ	J	AC Cord (LC-22AD1E)	AK
⚠	QACCBA022WJPZ	J	AC Cord (LC-22AD1K)	AS
	LHLDW0110CEZZ	J	Cable Clamp, x2	AE
	RRMCGA206WJSA	J	Wireless Remote Control	AZ
	TiNS-A930WJZZ	J	Operation Manual	AV
	TiNS-B110WJZZ	J	Operation Manual	AX
	TCADEA028WJZZ	J	Card	AE
	TCAUZA037WJZZ	J	Caution Card	AD

PACKING MATERIAL (*NOT REPLACEMENT ITEM*)

Ref. No.	Part No.	★	Description	Code
	SPAKFA464WJZZ	–	Packing Material	—
	SPAKCB059WJZZ	–	Packing Case	—
	SPAKPA235WJZZ	–	Wrapping Paper	—
	SPAKXA422WJZZ	–	Packing Add.	—
	SSAKA0170CEZZ	–	Wrapping Bag	—
	TLABK0001TAZZ	–	Carton Label	—

PACKING OF THE SET



Wrapping Bag (SSAKA0170CEZZ)

Operation Manual
(TiNS-A930WJZZ)
Operation Manual
(TiNS-B110WJZZ)
Card
(TCADEA028WJZZ)
GUARANTEE CARD (LC-22AD1K)
(TGAN-1688CEN1)

Remote Control
(RRMCGA206WJSA)
AC Adapter
(UADP-A056WJPZ)
AC Cord
LC-22AD1E (QACCKA007WJPZ)
LC-22AD1K (QACCBA022WJPZ)
Cable Clmp (2pcs.)
(LHLDW0110CEZZ)
Battery (2pcs)

Packing Add
SPAKXA422WJZZ

Wrapping Paper
SPAKXA235WJZZ

Packing Add
SPAKXA422WJZZ

Packing Case
(SPAKCB059WJZZ)

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